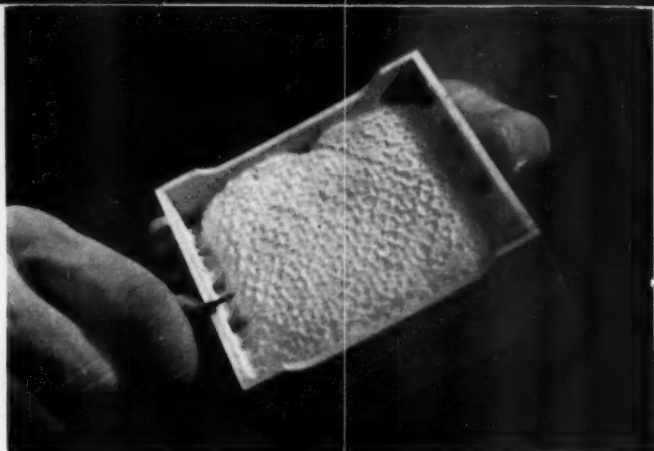


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The Cover Winner

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This beautiful dog is the grandson of famous Rin-Tin-Tin of Universal moving picture fame. The father was Rinlo, Jr., who took the place of his sire as Rin-Tin-Tin when the older dog became too old to continue in pictures. Rinlo starred in "Heart of the North" and other pictures and during the early 1940s was taken on tours of schools through the country. The trainer and owner was Vernon C. Browning, Oswego, Oregon.

Major, the son and grandson of this famous duo, was obtained by the Gears from Mr. Browning and is the last of Rinlo's puppies. His mother, Duchess, was a beautiful cream, registered, German shepherd. In the cover picture, Major is watching the bees in the blossoms of a small fruit tree. He became a little too inquisitive and a bee sought revenge. Howling with pain he ran to the fish pond where he splashed in the cooling water, (even as you and I). In the picture at the top of this page, Major is watching a swarm which Mrs. Gear has just hived from the limb of the oleander above.

The Gears have been commercial beekeepers for about fifteen years, operating 800 colonies. They move the bees from almonds to prunes, oranges, alfalfa and various wild flowers.

Cover Contest

Still going well. The pictures that win are not many but they are very good and we are surprised at the appreciation of quality and subject that contestants show. Why not try your luck? We will not use more than two cover pictures from any one person. Each month the award for the winner is \$10. Any pictures not accepted for the cover may however be used for other pages; or returned. Send glossy prints, 5 x 7 or larger. Try for pictures of unusual interest.

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137 pages, 61 illustrations
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Volume 91, No. 3

March, 1951

THE AMERICAN BEE JOURNAL

HAMILTON, ILLINOIS

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• • • NEXT MONTH • • •

Pioneering still goes on even in our day, as witness the new work in pollination being tried out by beekeepers. "Alfalfa Seed—1,000 Pounds per Acre" will describe a controlled large scale commercial experiment in the pollination of alfalfa in Yolo County, California. Results were amazing—1100 pounds average per acre yield when the state average was only 250 pounds. Geo. H. Vansell and Luther Jones worked out the experiment with Harry Whitcomb, beekeeper, and Stan Good, farmer. Read the practical details in the April Journal.

Another of those practical picture articles will appear in April—one on spring buildup of colonies for that important honeyflow.

David Bone, of England, writes beautifully about the production of heather honey in Yorkshire. Heather honey is one of the famous products of England. Don't miss this fascinating story of beekeeping on the moors.

Other features, news and association items, spring advice for beginners, and market trends will make up an issue worth watching for.



THE NEWSREEL



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It's possible to have your mailing address corrected by filing your new address with the Post Office, which in turn will notify us. But if a copy of the magazine is sent before that notice reaches us, it means expense in forwarding postage.

Carniolans

For those who can read the German the November issue of "Die Imme" will be of interest. It is a monograph on the Carniolan bee edited by G. Bonn and contributed to by several other authorities. We assume that individual copies of this issue might be obtained by remittance to the publishers, Die Imme at Ludenscheld, Germany, possibly for 50c.

Cary of New York

E. T. Cary of Syracuse, N. Y., has passed on. For years on end he had acted as secretary of the New York Association of Beekeepers' Societies. He was also manager of the A. I. Root Company's Syracuse branch. The Carys were a beekeeping family. The elder Cary (father of E. T. W. W., and J. H. all now deceased) was one of the pioneer beekeepers of the United States and a frequent contributor to the various bee journals of those formative beekeeping years.

All the sons followed beekeeping in one capacity or another. Mr. Cary's death occurred in December.

Kentucky Inspection

For years Kentucky beekeepers have been asking their legislature for inspection laws and an appropriation. This year, tired of being left out in the cold, they offered to do the inspection on a volunteer basis if the legislature would pass the inspection laws. The state has found a small fund which at least pays for the volunteer inspector's gas on trips. Until the state is sold on the importance of bees and pollination, Fred Miller, chief inspector, and other volunteers are doing a great deal to help Kentucky beekeepers.

Jere Frazer, Ohio.

Comb Rendering Leaflet

W. L. Coggeshall, Extension Apiarist for Cornell University is the author of a leaflet for New York beekeepers describing best methods of getting maximum beeswax from cappings, combs and slumgum.

While melting tanks and steam chests may be used, the hot water press is the most efficient equipment for removing practically all the beeswax from wax-bearing material.

More About Stingless Bees

A reprint of August 1950 *Revista de Entomologia* published in Rio, Brazil reports on "Bionomic Notes on Meliponins" (in Spanish).

The author, P. Noguiera-Neto of Sao Paulo reports three years study of the mixed colonies of two or more species of stingless bees where apparently such colonies work and thrive in perfect harmony.

A summary in English concludes the report. We assume copies might be obtained by addressing the author as above.

There used to be a farming rule
Of twenty acres and a mule.
Success was sought by lesser men,
With twenty square feet and a hen
And nowadays success you see
With 20 inches and a bee.

(per Pembroke Brown,
original author unknown.)

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What's Going On

Erie County, Ohio New Officers

At the January meeting of the Erie County Beekeepers Association held in Milan, Ohio, the following officers were elected: Pres., R. L. Livermore; Vice Pres., Geo. Miller; Sec'y-Treas., Stanley Wright.

Association activities include a honey display in the J. C. Penney store during National Honey for Breakfast Week, March 26-31. The group is also making sweet clover seed available for its members to buy for bee pasture planting.

The next meeting will be held at the home of Mr. and Mrs. Al Roeser, Beauty St., State Soldiers Home, Ohio, on March 3 at 8 p. m.

R. L. Livermore, Pres.

Marion County Beekeepers Assn. Marion, Ohio, March 5

On March 5 a meeting of the Marion County association will be held at the Y.M.C.A. Building Assembly Room in Marion, Ohio. Mr. James W. Bain, of Marion, noted queen breeder, will speak about package bees. All are cordially invited.

Bessie Wendling, Sec'y

Virginia State Beekeepers Assn. Lynchburg, March 6

The regular spring meeting of the Virginia State Association will be

held March 6, in Lynchburg at the Y.W.C.A. auditorium, 626 Church Street. An interesting program is being planned. Door prizes will be given and all beekeepers are urged to attend.

Henry W. Weatherford, Sec'y

North Carolina Annual Meeting New Bern, March 16

The N. C. State Beekeepers Association is planning to hold its annual meeting and election of officers in New Bern March 16. Both an afternoon and evening session is planned. We expect to have formal talks in the afternoon and movies at night. Outstanding authorities are expected to appear on the program, including Mr. M. J. Deyell, Editor of Gleanings in Bee Culture, and Mr. G. W. Vest of the G. B. Lewis Company. This is a public meeting and the whole thing is in cooperation with our Extension Service, under the direct leadership of Extension Beekeeper William A. Stephen.

Inquiries concerning meeting place, etc., should be made by contacting Mr. A. T. Jackson, County Agent, New Bern, N. C. Also literature and samples for this meeting should be marked "Beekeepers Meeting" and sent to Mr. Jackson.

Frank B. Meacham, Sec'y

Scene of International Congress

A view of the south end of the Parade, main shopping street in Leamington Spa, where the Fourteenth International Bee Congress will be held. Those planning to go should contact Nancy Ironside, Hon. Organizing Secretary, The Vicarage, Wragby, Lincoln, England.



**The Scottish Beekeeper's Association
Scottish Conference of Beekeepers**

A Conference of Beekeepers will be held at Aberdeen, Scotland on Friday and Saturday, September, 14 and 15, 1951, that is, during the week-end following the XIV International Congress at Leamington, Spa.

On the evening of Thursday, September 13, there will be a Dinner of Welcome to those attending the Conference and on Friday and Saturday there will be a series of lectures, a Honey Show and display of appliances, etc.

Robert N. H. Skilling,
Ayrshire, Scotland

Middlesex County Beekeepers Assoc.

Waltham, Mass., March 21

Next meeting of the association will be held at the association's winter quarters in Waltham on March 21. The club hive which has been assembled at winter meetings will be completed and stored ready for the first outdoor meeting when a package will be installed. The hive will be moved each successive month to the location of outdoor meetings and the growth and progress noted by members and friends.

John H. Furber, Sec'y

New Officers

At a meeting at the Museum of Natural History in Cleveland on February 4, the Cuyahoga County Beekeepers Association elected the following officers for the coming year: President, Dr. E. E. King; Vice Pres., Hewitt C. Adams; Recording Sec'y, Mrs. H. S. Clark; Sec'y, Edward Uhinck; Treas., Carl Sutter.

**Palmetto State Beekeepers
Columbia, S. C., March 14**

The Palmetto State Beekeepers Meeting will be held March 14 at the Jefferson Hotel in Columbia, South Carolina, from 9 a. m. to 4 p. m. The program will include: Advantages of Local Bee Clubs, by H. H. Dickson of Greenville, S. C.; The Pollination of Crops by Honey Bees, by Prof. David Dunavan, Clemson; Feeding Pollen and Pollen Substitutes, by Dr. M. D. Farrar, Clemson; Rendering Beeswax, by G. W. Vest of the G. B. Lewis Company of Lynchburg, Va. Mr. Jack Deyell of the A. I. Root Company will also appear on the program.

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The Other Side of the Pollination

by John W. Holzberlein, Jr.

Beekeepers' meetings today stress pollination. In the bee magazines possibilities of intensive pollination take a lot of space. Farm papers laud the insect pollinator. They tell how crops of legume seed have been doubled, even quadrupled, by the use of honey bees. Just dandy, and we love it. But it is about time to tell the other side of the story.

"All that glitters is not gold." In this case, "All that blossoms won't make seed." There are many cases where phenomenal legume seed crops have been made with the aid of honey bees. Crops that more than paid for the land on which they were produced, with the bees and hives thrown in. Yet there are countless stories where neither member of the bargain made anything. We don't hear much about them. There are stories where the farmer made a good seed crop, but failed to harvest it, most of the seed being left on the ground, making the farmer nothing and leaving the beekeeper disgusted.

Occasionally the farmer makes his good crop, but looking at the results, he remembers how long he owned the ground and made no crop, so he decides the beekeeper played only a small part in it, and that one-fourth of the seed (if that is what they agreed on) is too much. The beekeeper still has his bees, he reasons; perhaps he even made a little honey. The farmer only saw him a couple of times when he was moving the bees in and again when moving them out—he couldn't be out much, why give (some of them still think "give") the beekeeper all that good seed. That would be fantastic. So the farmer backs down on his agreement.

Then there is the one about the gullible farmer and the unscrupulous beekeeper. The farmer believes in bees. He has read that they will make a seed crop and he knows that seed is valuable, like money in the bank. So he rents bees from a beekeeper whose knowledge is no more

than his own. All the beekeeper is interested in is the cash rental which he gets in advance. He does not bother to find out that this farmer knows little about the essentials necessary to make a seed crop. And the results? The colonies may, or may not, be indifferent. It doesn't matter much, for if any one of a dozen things happens to this farmer, he has made no provision for them. He thought bees alone would do it. No seed, that's all. Now the beekeeper gets the blame and we hear the story from the farmer.

Bees Just One Factor

Honey bees have a definite place in legume seed production. This we know. The decline of wild bees has been taking place for years, and the farmer has come out of his Rip Van Winkle nap to the realization that insect pollinators are necessary and that the honey bee is his last resort. Too often he fails to take into account the other factors just as important as the presence of large numbers of insect pollinators—soil fertility, competing fields, pests, and harvesting. Let us regard each one briefly.

Soil Fertility

It has been demonstrated by research that soils deficient in phosphate will not give the maximum yield of seed. While growth producing elements need not be abundant for seed production, phosphate must be present in sufficient quantity. It seems to have a definite bearing on nectar secretion. Without nectar to attract the bees, other fields within flight where nectar is abundant will get most of the bees and most of the pollination. So before entering a seed producing contract with a farmer, it is well to check by soil analysis to make sure phosphate is satisfactory.

Competing Fields

While honey bees are the only pollinating insects under the control of man, even they are not too closely

controlled. For instance, if an attractive field of sweet clover is half a mile from the field of red clover where pollinating is supposed to be taking place, it is apt to be pretty hard to get enough bees to stay in the red clover to get a satisfactory seed set. Many more colonies will be needed than if the sweet clover had not been present.

Supposing a farmer on the east side of the road contracts for bees for his red clover. What is to prevent the farmer on the west side with an equal acreage from getting almost the same service free? That happens constantly and the only fair solution is for the pollination to be carried on by communities rather than by individuals. And, brother, that takes salesmanship!

Not only are we concerned with the presence of competing honey and pollen plants, but where there are many acres of wild uncultivated land, where weeds and wild flowers grow, these often afford a better source of pollen than the crop we are trying to pollinate. So again we must put in double or more colonies than we would if only the field we are trying to pollinate were concerned. So pollinating results are most often satisfactory where the crop is grown on arid, prairie ground where irrigation is necessary to produce appreciable plant life or in regions where grasses and grain crops unattractive to bees make up a large part of the acreage.

Here in western Colorado where an abundance of wild flowers are in bloom through the seed forming period for first cutting alfalfa, it is hard to get enough concentration of bees to produce a set. During the second bloom when the wasteland has dried up and few wild flowers are in bloom, it is easier to produce seed. But here again care must be taken so that this blooming period be crowded ahead far enough to make certain the seed has a chance to mature before frost.

Picture

Top left: Certified alfalfa seed—the farmer's gold.

Below: Three trucks loaded with certified seed. The crop from one ranch was 54,900 pounds from 125 acres.

Top right: Field of Colorado's "Meeker Baitin" alfalfa.

Below: They still talk about Dick Lough's bumper seed crop. (Photos courtesy the Meeker Herald.)



Pests

My experience deals only with pests that affect alfalfa. There are plenty of them. The most important are: lygus bugs, alfalfa weevils, grasshoppers, chalcids, thrip, and army worms, fortunately, most of them controllable by one means. Each of the legumes has its own array of pests and the grower and the pollinator should know them. If seed is to be produced, they must be controlled by a means that will not cause undue harm to the pollinators. A wide range of new insecticides is on the market. Some of them, toxaphene for example, are much less toxic to bees than others. An agricultural college can recommend the proper one to use and give approximate dates for use. Accurate timing is most important in pest control. When recommendations call for spraying in the bud, that is when it should be done. When they call for dusting when the growth is one to two inches high, they do not mean six inches. When they call for applications before 7 a. m. to avoid injury to flying pollinators, they do not mean one can begin at 7 and spray until 9 a. m. But we know farmers. They are people. And it is hard for some to do things on time. They fail to realize how rapidly things happen in Nature. The farmer will think, "That field is coming into bud, I'll have to spray

it for lygus bugs. Johnnie, next time you go to town be sure to get that thingumajig that we broke on the sprayer last year, and some DDT."

So Saturday Johnnie gets the thing and the spray material and the spray rig is put in readiness, but it rains in the meantime, so it is Thursday before they spray. A week has gone by and quite a little bloom has begun to show. Besides that, the lygus bugs are raising hell. So the good farmer in his anxiety to make up for lost time puts on 3 pounds of DDT instead of the 1.5 pounds recommended. And what does that do to the bees? It kills them, that's what it does. At best there is a fine line between the right amount for pest control and the "too much" that kills. Much time has been spent in working out proper schedules. Still people pay too little attention. They spray when it is handy and then blame the material because it fails to protect their crops, or kills the bees. For best results, it may prove advisable for beekeepers who practice pollination on a large scale to own and operate their own spray rigs. That correct methods of pest control be used should be a part of every pollination agreement.

Moisture and Weather

We can do little about the important subject of weather. All ef-

forts can be upset by one quirk of Nature. Too long a drought, or ten minutes of hail can undo a season's work. Under irrigated conditions moisture may be controlled. The use of water is highly important, and the seed grower with irrigation has an advantage. But all the seed needed cannot be grown on irrigated farms, so we have to assume that Nature is most often kind, and go ahead and make the best of it. Moisture conserving practices may be applied where rainfall is apt to be light. Where it is apt to be heavy, seed production is seldom profitable.

Harvesting

Poor harvesting methods can cause heartbreak. How futile to go through a successful growing season only to leave a large part of the mature seed on the ground. Yet relatively few farmers know how or have the machinery to save the maximum amount. New harvesting equipment is being perfected and as farmers become familiar with it, no doubt more of the seed will be saved. Here again the time element is all important, and large pollinators are finding it profitable to own and operate the equipment, rather than to depend on the farmer to do the harvesting. This should be seriously considered before entering a pollination contract.

The Competing Beekeeper

The above problems largely involve the farmer. But there are other problems just as important to the beekeeper concerned. Take for example the case of the competing beekeeper. Until beekeeping organizations take over more of the control and better rates are standardized, there will be many cases like the following: Let us imagine you are an established honey producer in a fully occupied area. A farmer wants to produce seed on 100 acres of alfalfa, but is unwilling to pay you as much for your bees as you have a right to expect from honey production. Let us say your yards are about half a mile and a mile from his fields with 60 colonies in each yard. He wants them right in his field and he wants three colonies per acre. You find it impossible to deal with him. So he advertises for bees. To complete the picture imagine I am a pollination-happy beekeeper from "Arizhoma" whose normal honey season ends before yours begins. I do not know conditions in your territory, but I can read, and I read that this man wants bees. He wants 300 colonies to pollinate 100 acres of alfalfa. My bees are doing nothing anyhow and this farmer will pay me one-fifth of the seed above four bushels up to eight bushels and half above that. Oh boy, supposing he makes 20 bushels—I'm in the chips! So I move my 300 colonies right into his fields, half a mile from one of your yards and one mile from the other. And what happens? The sun shines, the rains come, the seed sets, but a hail comes along and knocks off most of the seed. The field yields an average of

three bushels per acre. I make nothing, you have been forced to move out to keep your bees from starving. Similar cases have happened and nobody seemed very happy. How often will it happen?

Colony Decline

Another problem, too often unforeseen, and about which too little has been said, is the problem of colony decline. Too often colonies are in poor condition at the end of the season. Often the farmer specifies that bees be set in long rows through the field or along one edge. Unthinkingly the beekeeper complies, with no thought to means for colony orientation. So the bees drift badly, the end hives being covered with bees while those in the center may not have enough left to maintain brood. Both groups are demoralized, a poor job of pollination is done and by the end of the season perhaps 75% of the colonies are unfit for winter. Even greater losses than this have been reported, with drifting a contributing cause.

Where an area is saturated with bees to secure maximum seed of alfalfa or red clover, colonies are almost certain to be sub-standard at the end of the season, even without drifting. Unless one is able to scatter his colonies on fall locations in time to secure a flow, expensive feeding must be practiced.

Honey and Seed

Where sweet clover is being pollinated and in some cases alsike and western alfalfa, a surplus of honey is often secured. This is fine until Mr. Farmer informs you he wants to cut his seed next week and please

get your bees out. Ever try taking off honey with bees strung out for half a mile through waist high sweet clover? And then trying to move the hives the next evening with the bees clustered all over them? The situation is tedious to say the least.

Agreements

It all adds up that pollination is no picnic and no sure-fire money maker. If you can set the stakes high enough and deal with conscientious farmers the good years may take care of the bad ones. Even then agreements should be carefully prepared, and signed by both parties before witnesses. If disagreement arises as the season progresses, it is then not so hard to determine what the obligation of each one is. If the agreement will stand up in court, the chances are it will never have to go there.

Big Deals

If one is going to pollinate with thousands of colonies, as some are, largely forsaking honey, he will most likely find it profitable to own and operate the spraying and harvesting equipment. If he is going to do all that, why not own or operate the soil and keep all the seed? Some beekeepers will do that, the same as some farmers will want to own all the bees. There are enough ramifications in either to take all the time and thought most men can give. If satisfactory agreements and practices are worked out, it would seem that each can still be operated as an individual enterprise. We have learned one thing—the success of each is dependent on the other.

Colorado

Moisture Conditions

Most reports coming to this office would indicate that surface moisture conditions seem satisfactory. Digging down deeper, however, we find that there has been a deficiency of rain and snowfall since late last summer. This has resulted in a shortage of moisture in the subsoil. The "Grand Island (Nebraska) Daily Independent" hopes for a lot of snow and rain to make up for this deficiency which has been accumulating since last September.

For its part, beekeeping is much more apt to flourish in a season of too much moisture than in one which is skimpy on rain. If the old almanacs are correct, we may have some of this deficiency made up before spring actually arrives. They say that the only redeeming thing about our March this year is that it will bring us that much nearer spring.

Much as we like to doff the red flannels, heavy snows and a late spring may be what the doctor ordered.



What Chamberlin says makes sense. He strikes a balance between wintering the best, gassing the poor and buying replacements from a selected shipper.



Packages and Overwintered Colonies

by N. R. Chamberlin

Wisconsin

THIS morning it was 22 degrees below zero outside at sunup.

Even if it were twice that cold, any discussion of the above subject would bring up that problem of WINTERING. Whenever I come across that subject, I throw the ABJ down and go out and do some disagreeable job like cleaning out the pig pen or the calf barn. Of course, I read the article later on. Usually at the end of the article the name of the state in which the author lives is given, and I find that he lives so far south of here that comparatively he has no winter problem at all.

Let's get down to cases. I live nine miles from Lake Superior. One third of the way there is a geodetic marker which reads 934 feet above sea level. The lake is 602 feet above. As far as I can find out, my bees are about 500 feet above the lake level. On a clear day I can go down the road about a mile and see the hills across the lake 75 or 100 miles away. When the wind is roaring down out of the Arctic it hits this area without anything to check it for about 100 miles.

There is a strip of second growth timber about a mile wide just north of my bee yard and the difference that timber makes is hard to believe. South of my yard is several more miles of timber. A beekeeper friend of mine has his yard located about five miles south of mine. Even in that short distance we have an entirely different winter problem. Those miles of trees trap and check the cold north wind enabling a February or March sun to warm the air enough for his bees to enjoy

winter flights when mine are still hivebound.

My neighbor and I have been keeping records of bee flights. He has been successfully wintering his bees for several years and has very little need of packages. I have made a practice of killing off mine, after the first heavy freeze, except those headed by exceptionally good queens. These I winter in moderate packing, both wooden cases and tar paper with dry leaves, straw or planer shavings.

I have a bent for experimenting and have tried many systems of wintering. The winter we had 36 days in which the mercury never got above zero and the bees were hivebound without a flight 156 days. I lost all colonies not packed. Some of my packed colonies came through in wonderful condition. Others were too weak to be of any value.

I order early in the fall a nice shipment of packages to arrive in the spring. When the bees are gassed in the fall I know how much equipment will be available and if more than 30 packages are needed I have a second shipment come about four days after the first. I have combs of honey and pollen from the gassed colonies to give the package bees on. The queens are killed in the gassed hives 21 to 25 days before gas is used so the combs are free of brood and well loaded with pollen and fall honey.

More bees are going to be wintered successfully even in the far north. At the present time there is one hive of bees to about 100 acres in most of the northern states. There should

be ten times that many bees. Pollination needs demand it. There is also room for the honest package shipper who gives good service, improves his stock and merits the confidence of the northern beekeeper. The unworthy shippers will pass out of the picture when the sledding gets tough.

Each northern beekeeper has his own peculiar problems. Many are successfully wintering and many are depending on packages and killing all their bees in the fall. From where I sit, I believe the number is increasing of those who both winter and use packages.

A shipment of young vigorous bees and queens in the spring is wonderful insurance in case a severe winter should come. Then in case an unfavorable spring comes to the South (as it did in '47 or '48) and we get packages loaded with Nosema like some of us did, those overwintered colonies are wonderful to fall back on. An unusually severe winter in the north and a cold wet spring in the south are not apt to occur together oftener than once in 25 or 50 years. So the system of wintering the best colonies and buying packages also makes a very nice combination.

There is a great need for closer cooperation between the package producer and the buyer. Each has his peculiar problems. Mine do not look so serious after I have had a good look at my package producer's problems. A week's work in his queen yard has greatly enlarged my admiration for what he is doing for beekeeping. Let's pull together.

Those who attended the annual meeting of the American Beekeeping Federation returned home with a renewed feeling of confidence in the future of the bee and honey industry. Although a cold wave and the first snow storm of the year came as the meetings got underway, attendance was not reduced materially, for about 300 interested and enthusiastic representatives braved the storm to get there.

In addition to the regular program of the Federation, there were meetings of the Apiary Inspectors of America, Bee Industries Association, the American Honey Institute, and the Board and Executive Committee of the Federation. Committees which met and furthered their programs of action included the Honey Handling Standards Committee under the chairmanship of Henry Schaefer, the Marketing Committee directed by Howard Foster, the Committee on Definition and Standards for Honey headed by Dr. E. F. Phillips, and the Honey Grades Committee with Dr. Phillips acting as chairman for Dr. E. J. Dyce.

Colorado Beekeepers Were Grand Hosts

From the time of the opening of the meeting by J. K. McClaugherty, president of the Colorado Beekeepers' Association, to the banquet, toastmastered by John Holzberlein, it was apparent that the Colorado beekeepers were determined to see that everyone had a good time, and that this meeting would be different—plenty of fun, fellowship, and entertainment of the finest kind. Each session was started with accordion music, door prizes were awarded for those coming promptly, and the banquet featured good humor, an excellent male quartette, and a chalk talk in which a few of the group were caricatured. The only thing that Colorado had to apologize for was the weather, but even that had turned balmy by the time people started home.

The Theme of the Convention

John Holzberlein, Jr., of Colorado, introduced the theme of the meeting to the convention: organization, marketing, and pollination, telling that the condition of the industry was due to too many years of relatively low prices for honey. He strongly pointed out that the industry was going to have to do more to stand on its own feet if it was to continue. The address of the president, Roy A. Grout, enlarged further on this theme. In a straight-for-



Left to right: Harold J. Clay, Fruit and Vegetable Branch, F.M.A. Washington, D. C.; Roy A. Grout, past president of the Federation, and Glenn Jones, secretary-treasurer.

Stories about the Denver Convention

ward address, he pointed out what the Federation had accomplished in the past two years in its programs, and admitted to those present that the organization was facing a crisis. To continue to serve the industry as the industry expected it to do, it would be necessary to have additional support, both moral, physical, and financial. The report of the Secretary-Treasurer, Glenn O. Jones, gave details substantiating the financial plight of the organization, showed that progress had been made in organization since we now had as members 14 state associations and several local or regional associations, and explained more fully the structure of organization of the Federation.

Marketing Is Important

Howard Foster's Marketing Committee spent many hours discussing this problem and building a program of action, and a full day of the program was devoted to discussions by beekeepers and packers of this part of the Federation program. A request was made that the News Letter list names of honey buyers and also names of members having honey for sale. It was also thought that the publicity program should give emphasis to gathering material on methods of handling honey and to disseminating such information to the industry.

Pollination Vital Topic

Dr. S. W. Edgecombe, co-chairman

of the Honey and Pollen Plants Committee introduced this subject to the convention and took charge of this phase of the program. A pleasant surprise to the convention was the appearance on the program of Dr. G. E. Bohart, Division of Bee Culture, who is carrying on experiments on alfalfa pollination at Logan, Utah in cooperation with Utah State Agricultural College. Dr. Bohart reviewed what is known to date on this subject. S. W. McGregor of the Southwest Bee Culture Laboratory, substituted for Jas. I. Hambleton who was called to Washington, and reviewed the pollination studies now being carried on by the Division of Bee Culture. This phase of the meeting was closed by a panel discussion in which quite a number of beekeepers reported their experiences.

Beekeepers Decide Future of the Federation

E. H. Ade, president of the Nebraska Beekeepers' Association, led the group in a rally to erase the deficit of the Federation and see it off on an even broader basis of service for the industry in 1951. Over \$2,000 was raised in this meeting by producers who were willing to double their membership payments or make substantial sums available for this purpose. Their action left no doubt that the organization would be continued, and that they considered the organization essential to the future of the industry.



N. C. Jensen (left) Macon, Mississippi, breeder and new president of the Federation with the newly elected vice president, Glenn Gibson, honey producer and pollinator from Minco, Okla.



Dr. E. F. Phillips of Cornell University addresses the convention. (Photos courtesy Clarence G. Langley)

Officers Elected for 1951

N. C. Jensen, of Mississippi, was elected president of the American Beekeeping Federation, and Glenn Gibson, Oklahoma, was elected vice president. The Board of Directors consists of those elected by member organizations to represent them, plus

nominations made from the floor. The list is too long to include here. This Board then elected five from its members to serve with the officers as an Executive Committee. They are Clarence G. Langley, Minnesota; John W. Holzberlein, Jr., Colorado; E. H. Ade, Nebraska; Charles C. Hansen, Texas; and How-

ard Graff, Washington. The retiring president automatically becomes an ex-officio member of the Executive Committee. This group met for a full day following the convention to further plan a program of action for the year. Glenn O. Jones was again hired as Secretary-Treasurer for the year.

What Does the Price Freeze Mean?

Effective Jan. 26, 1951, Michael V. DiSalle, Director of Price Stabilization, issued his General Ceiling Price Regulation. Price ceilings for a list of agricultural commodities, which are selling below parity, were made subject to adjustments corresponding to the increase in price of such commodities up to the legal minimum (parity in the case of honey). Honey inadvertently was omitted from this list of agricultural commodities, as also was beeswax. As of February 12, honey was included, but beeswax is not included, as of this writing (February 18).

Under the amended ceiling price regulation, beekeepers are exempt from price ceilings for extracted honey sold at wholesale. Until such time as the wholesale price for extracted honey reaches the legal minimum (parity in the case of honey), beekeepers are at liberty to get the highest price they can obtain for their crop. Parity for extracted honey at wholesale in all sizes of containers was 17.5 cents per pound on January 15.

Prices for honey at the packer to retail level are frozen by the regulation. Packers are permitted to adjust their selling prices upward from

the base period, December 19, 1950 to January 25, 1951, by the dollar and cents difference between the price paid for a current purchase of honey and the highest price paid during the base period. Sellers are required to report their ceiling prices and their basis for such determination to Washington. Their adjusted price becomes effective and legal upon mailing of such notification.

The legal minimum for comb honey at wholesale, we presume to be parity, namely 31.8 cents per pound.

The status of beeswax prices at the beekeeper level is not clear. Parity for beeswax on January 15 amounted to 51.4 cents per pound.

Limitations on Tin Containers

Use of tin containers for honey was somewhat restricted by the National Production Authority on January 27, 1951. Our interpretation of NPA Order M-25 follows. However, users are urged to study this order and to seek further interpretation from Washington officials.

Sixty-pound containers are not restricted as to use and there will be

little change in the quality of tin plate. Cans for bee feed in shipment of package bees are restricted to 90 per cent of the quantity used during a previous 1949 or 1950 quarter, and must be made from $\frac{1}{4}$ pound electrolytic tin plate.

Packers who repack honey from 60-pound tin containers into 5- and 10-pound cans cannot use more than they did in a corresponding quarter in 1949 or 1950. Beekeepers who pack honey directly from their storage tanks into any container for distribution and final consumption (whether 60-, 5-, or 10-pound containers), apparently are not subject to restriction.

Although distributors of tin containers do not appear to be limited as to stocks they can carry, manufacturers are applying "user" limitations to them. Unless changed, this only can mean that many users of tin cans will find it exceedingly difficult to obtain the containers they require.

On the whole, it appears that 60-pound containers will be difficult to secure although not restricted in use for honey. Users of 5- and 10-pound tins, as well as cans for bee feed, not only will find it extremely difficult to obtain supplies but are subject to limitations on the quantity they can use.



Use of Honey When a Child is Cutting Teeth

by D. C. Jarvis, M.D.

WHEN pain appears during the cutting of one or more teeth in a child, one's attention turns to the autonomic nervous system in the child's body and the need of calming down the overactive sympathetic division which is associated with the presence of pain.

The autonomic nervous system in the human body is made up of two divisions. One is called the sympathetic division and the other the parasympathetic division. These two divisions may be likened to the two reins with which one controls the driving of a horse. We observe the opposing action of these two divisions when we study the pupil of the eye. When the sympathetic division is stimulated the pupil dilates but when the parasympathetic division is stimulated the pupil of the eye

contracts. Likewise, when the sympathetic division is dominant in the body, pain is very apt to be present. When the parasympathetic division is dominant the body is organized for peace and quiet and freedom from pain may be expected. When a child is cutting teeth the sympathetic division dominates the control of the body. When this happens pain is generally present. Associated with a dominant sympathetic division in the child's body there is also a high blood and tissue phosphorus level which is high when inflammation and pain are present in the child's body.

Supposing your child is very unhappy while cutting teeth because of the pain that is present. How may you reduce the pain, enable the child to have a better night's sleep and also get a better night's sleep yourself? Where will you find the therapeutic agent that will calm down an overactive sympathetic division of the autonomic nervous system and lower the blood and tissue phosphorus level? You will find this needed therapeutic agent in honey.

At bedtime a child less than one

year old is given one-fourth of a teaspoonful of honey. After taking the honey from the spoon the child is given a little water to drink. As the child grows older the amount of honey given is increased until eventually the child is given a teaspoonful of honey.

When honey is given to a child cutting teeth to act as a body sedative by lowering the blood phosphorus level it will require two and one-half hours before a blood examination shows a drop in the blood phosphorus level but the child may show the sedative effect of the honey within an hour after taking it. When the blood phosphorus level is lowered by honey it will stay down for twenty-four hours. A return of the pain shows that the blood phosphorus level has again risen in the child's body again producing pain. This re-appearance of pain indicates the need of giving honey again.

With the aid of the sedative effect of honey it is possible to guide a child through the cutting of its teeth with much less pain and discomfort than it otherwise would have.

Vermont.

Our Real Purpose

The national emergency and the food program presents two challenges to the beekeeping industry: (1) To organize effectively so that the bee and honey industry can cooperate to the fullest extent with our Government, and (2) to educate ourselves as to how to best serve agriculture in our pollination work so that the country will produce larger crops of food and seed.

Will the beekeeping industry arise to these challenges? Slowly and surely we will! We are faced with a national emergency! Honey will help to conserve sugar, if and when we are faced with a shortage. But, we must ad-

mit that this country can get along without honey as a sweetening agent. If we need more beeswax, we will produce more, as we did in the last war period. But this country cannot meet an emergency without adequate pollination of more than fifty food and seed crops.

We must awaken to this fact and cooperate fully with growers to the mutual benefit of each party—for this is the real purpose of beekeeping. It is the major reason why honey bees were created and endowed with their God-given instincts to collect nectar and pollen, and thus to cross-pollinate crops.



Left—Mountain cornflower in the American Bee Journal test garden is a desirable ornamental.

Below—Closeup of the blossoms of mountain cornflower. It is a good nectar producer.



Mountain Cornflower

by Frank C. Pellett

A perennial garden flower, useful for naturalizing on wasteland.

THE cornflowers are a very large group belonging to the genus *centaurea*. Among them are many annual garden flowers, several weeds of wide distribution and a few desirable perennials. Nearly all are good honey plants and even the weeds are valuable to the beekeeper. The star thistles in California belong to this group and in some neighborhoods are the source of a large part of the surplus honey.

The common garden annuals commonly called "bachelor's buttons" are well known from one end of the country to the other and are usually swarming with bees during their time of bloom. In some localities they have run wild and are widely scattered along roadsides and where sufficiently common may even offer enough nectar to be of value to the honey producer.

It is only the weeds, however, which have spread sufficiently to be recognized as important for bee pasture. The yellow star thistle (*Centaurea solstitialis*) blooms from July until October and offers a slow but continuous honeyflow. It yields a light honey of heavy body and brings a top price in the West.

Napa thistle or tocalota, (*Centaurea mollis*), comes into flower earlier and yields a light amber honey in May and June. It is regarded as a pernicious weed which

is widely distributed in California. The Russian knapweed, (*Centaurea repens*), is another pest which annoys the farmer while offering a harvest to the beekeeper.

The weeds spread in spite of all efforts for their control and no effort should be spared to avoid bringing them into new neighborhoods. Agriculture already has enough weeds with which to contend. There are wastelands, however, where good honey plants which do not become troublesome can well be naturalized.

It has been said that "Nature abhors a vacuum." Perhaps it is for this reason that weeds so quickly take over any unused land. It is quite probable that the time will come when there will be an organized effort to plant something either useful or ornamental on all wasteland and such unused areas as roadsides. If the unused land along our highways could be planted to perennials which are the source of abundant nectar, it would go far to stabilize the bee pasture. The growing need for honey bees to ensure pollination of so many important crops may yet result in this means of utilization of such areas.

It is for such situations that the mountain cornflower or mountain bluet, (*Centaurea montana*) is so well suited. It is a perennial and a very desirable garden flower. It

blooms for several weeks and is very attractive to the bees. As far as we have been able to observe it has no tendency to become weedy in habit, but once established it should remain for some time.

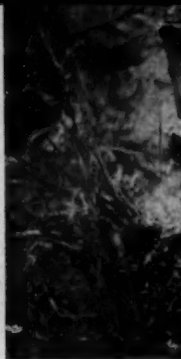
It is the kind of flower which is likely to interest the garden clubs when they undertake the replacement of weeds with flowers in vacant lots such as are to be found on the outskirts of every city. Its general planting will please the public because of its beauty and be helpful to the beekeeper as a source of honey.

The French botanist, Gaston Bonnier, recognized its value as a nectar producer in France and records the fact that the bees gather from it in great abundance. Apparently as a group the cornflowers are very adaptable as to soil and climatic requirements. They are very easy to grow, the weedy ones too easy. Fortunately mountain cornflower combines many desirable features such as ease of culture, beauty of flowers, attraction for bees and wide adaptation to environment.

We have had mountain cornflower in the test garden for a number of years and find much to recommend it while no objectionable features are apparent. Like others of the group it is always attractive to the bees.



Use the walk-up plank so each man can set his super under the cover cloth.



Use acid for the removal of extracted honey. It is a quick, easy job.



The Effect of Costs on Management

by G. H. Cale

allow to his income. From there we go on up to the big time commercial fellows who must get all their living from the bees or quit. And many of them are quitting. The old years are gone when we kept bees regardless of cost; when we just liked keeping them. Sure, there are some of that crowd left but the vast majority of worth-while beekeepers, by one standard or another, are commercial.

I have been a large beekeeper and I have been a small one. I have kept bees on an absentee basis, paying for everything, and on a self-operating basis at a lower cost. As I look back I find that most of the changes I have made had to do with costs and it may be that I have bees now because I was forehanded enough to make such changes, even though my present books show a debt that must still be paid.

One of the highest costs has been labor. Forty cent labor has gone up to a dollar twenty an hour labor. There may be some who can get skilled labor for less but most lower priced labor is unskilled and only of value on a helper basis. Perhaps the way out is to do the work yourself. If you can do it in your spare time, good. That will lower costs provided you can do little in that time that may be more profitable. Or provided you do it for the pleas-

ure you get out of it. I do much of my own work that way. That brings on two limitations. You must not lose needed income just to avoid paying labor. Often your labor value is more than what you pay someone else to help or to assume management. The second limitation is that the size of your operations on a self-serve basis, whether you are a part-time man or a full-time operator, can be no more than you are able to handle.

Another limitation in these high cost days is location. Many previously profitable locations are now untenable. Obviously you can go somewhere else but where is often an aspirin tablet problem. You can restrict yourself to those spots where you have been doing well, you can look for and try other spots, until by trial and error you have what suits, whether that be near home or far from it. You may run into location "rights", but usually with care and effort, you can improve your situation. When you know what your average crop is, then you can fit your cost dollars to it and examine every means possible to leave more in the pot than you put in to operate.

Then there is transportation. Gas used to cost us 12c, now it costs between 25c and 30c a gallon. Our

Ever try two-queen colonies? You often get fifty to a hundred per cent more honey from them.

NCESSITY is the mother of many things besides inventions and the tight pinch of losses or almost vanishing profits in commercial honey production bring on the immediate need to cut what it costs to produce the crops—or else.

Isn't it fine that the majority of beekeepers earn a living from some other occupation and have bees for fun! But I talked one day recently with a man who has a good salaried job but likes bees. He has about twenty colonies and he likes to sell his honey for a profit. Another is a master plumber, with two hundred colonies as a side line, who expects his bees to add as much as costs will

nice Chevy once cost \$950; now about \$2000-\$2400. How far do you want to go? Obviously the closer home the better; and at distances, the fewer trips the better. We used to make somewhere from fifteen to twenty trips to a yard and some of them were almost on a curiosity or fun basis. Now we average eight to ten. We could reduce it more. We can stay longer days or overnight and take a big truck load of everything we think we may need, even if we have to bring some of it home. We have yards 250 miles from home where we try to do all we can in as few visits as possible, staying as long as necessary and trying to anticipate needs well ahead.

It is easy, as an example, to put on at least one more super to the colony

than it needs, and to put another above the oil or cover cloth (which we use) with the corner turned back, as a safety insurance if the flow gains more momentum than you expect. Then you won't have to return for a time. It is easy, during spring feeding, to use a pail of syrup and five pounds of dry sugar at one time. Then you are sure that colonies found short of feed will be provisioned for quite a period. If the sugar is not used it was not needed and it can be put back in the sack.

Also combine requeening with other operations. If you know how, you can replace queens anytime. Do your fall closeup and last-of-the-season work with the removal of honey. Don't go back to do it. You can even feed short colonies then

with division board feeders.

Finally, use sulfa as a disease preventive. Before sulfa days, the close supervision disease required often was 30 per cent or more of costs. Use acid for the removal of extracted honey. Fix your trucks so each man can walk up into the truck and load under cover cloths. In the honey house streamline your extracting work on a long day basis. Use radials, top-heat melters, united flow lines, pumps or gravity. Do off-season extracting. We often are extracting just before Christmas.

When you sell, don't give your honey away (as I have often done). If no buyer will be decent in price, do your own marketing. If all of this is too much for you, don't keep so many bees.

We've Passed the Crossroads • Further Express Increases

Approximately 300 representatives of the beekeeping industry met in Denver, Jan. 31 to Feb. 2, to seriously consider industry problems and to chart a course for the future. It was the annual meeting of the American Beekeeping Federation.

Most of these representatives came to this meeting full of apprehension about the future of beekeeping. They had experienced too many years of relatively low prices for honey. They had large investments at stake; they had a love for beekeeping. Could they continue to keep bees? The industry was at a crossroads.

A more interested, determined group never met before in the history of beekeeping. They seriously considered our problems of organization, marketing, and pollination. They threshed out many problems.

They came away from Denver more determined than before to forge ahead on an even broader organization basis, to expand and to make our honey marketing programs more effective, and to enter into pollination as an agricultural practice in an increased way.

The bee and honey industry had passed its crossroads and now is on its way to a future that will be much brighter as we work together to build for ourselves a better way of life in keeping the bees.

The program charted by these representatives of the beekeeping industry deserves the support of beekeepers everywhere.

The Railway Express Agency again is petitioning the Interstate Commerce Commission for further increases in express charges. The proposed increase for shipments of package bees amounts to 85½ cents per 100 pounds gross weight of shipment, and requests a minimum express charge of \$2.00 per shipment. We are informed that the Interstate Commerce Commission anticipates that hearings will be held at several places throughout the country at an early date.

Appeals to the Railway Express Agency to lower its rates on shipment of package bees have received full consideration by Mr. A. L. Hammell, president of the Agency. He recognizes fully the hardship which such increases place upon an industry that already is heavily burdened. He recognizes the importance of honey bees to our agricultural economy. Undoubtedly, increased express rates are justified by increases in labor and material costs. This Agency is forced to compete with other carriers that are subsidized by the Government. They either must increase their rates or go out of business.

The industry has asked Mr. Hammell to make an exception to the proposed rule by allowing package bees to be shipped, during the main producing season, at a special rate.

Beekeepers everywhere are urged to find out when and where these hearings will be and, if possible, attend the hearings presenting your own objections to these proposed rate increases.

Insecticides . . .

Our old friend Dr. R. L. Webster, state entomologist for Washington who continues active work and research in spite of having reached retirement age, presents another revision of his Station Circular No. 64 entitled "New Insecticides; Their use, Limitations and Hazard to Human Health."

The 52-page mimeographed bulletin goes thoroughly into the use and misuse of various insecticides and their immediate as well as ultimate possibilities of injury to human health.

Except for parathion, the arsenates and the seleniums, if properly used according to specifications, there is little contact danger from the various insecticides, and arsenates have been carefully guarded against by specific regulation to protect human health, though these compounds still are probably the largest killers of honey bees.

Webster does not tell us, however, what the cumulative effect of these chemicals in our soils ultimately may be. Already some indications point to injury to crops from the accumulation of these residues in the soil.

Copies of the bulletin no doubt may be obtained by addressing the Experiment Station at Pullman, Wash.

Migrating Bees . . .

Migratory beekeeping is not confined to the North American continent. Two beekeepers migrated 2400 miles in 1948, moving from New South Wales to Western Australia. They moved to the karri forests. The karri tree blossoms as high as 200 feet from the ground. The flowers are not visible from the ground and the beekeeper must rely on broken blossoms on the ground and the activity of nectar-seeking birds to determine the flowering period. The trees started blossoming in December 1948, and the bees visited the blossoms until cool rainy weather in July, 1949. At the peak of the season 15,000 hives were distributed in the karri forests, and 1200 tons of good quality honey were harvested. This is an average of 160 pounds per colony. (Reported in "B" Notes of Colorado A & M College, December, 1950 as taken from an abstract in Bee World 31:78, 1950).

The Sun As a Compass

This is the translated title of a publication by K. Von Frisch which appeared in *Experientia*, VI, Nr. 6, pp. 210-221, 2, in 1950. It has been translated by Mrs. F. A. Nikoloff, Cornell University, Ithaca, New York, at the request of Dr. E. J. Dyce, Professor of Apiculture. It is our understanding that only a very limited number of copies of this translation are available.

This paper, along with Frisch's book recently published by the Cornell University Press (December 1950), reviews and brings up-to-date most of the outstanding work on bees by this man.

This paper reports how Frisch constructed a model of a single bee's eye using an arrangement of polaroid sheets. Using the artificial bee's eye in parallel experiments with dancing bees, he was able to demonstrate further that the plane of vibration of the polarized light of the sky determines the direction of the bee's dance (as a means of communicating to her hive mates the direction in which food can be found), and that the bee is able to analyze the polarization of skylight.

Light from the clouds is not polarized and Frisch reports experiments performed under a completely clouded sky. He had previously pointed out that bees utilize the sun's position as a compass, and a further experiment is reported in which bees sought their usual feeding ground in the correct direction even though transferred to an entirely different landscape. Experiments carried out under his supervision show that ants (*Lasius niger*) also possess the ability to orient themselves according to the polarization of the light of the blue sky.

Langstroth's Bee Space 100 Years Old . . .

Just a hundred years ago American beekeepers were given an idea that revolutionized beekeeping not only in this country but over the whole world; for it was 100 years ago that Langstroth discovered the significance of the bee space and evolved a wood hive containing frames which would take advantage of this beespace. The top-opening

feature of his original Langstroth hive making possible the examination of any or all frames without tearing the cluster completely apart has been of inestimable value. Ever though some of our European contemporaries still use the side or end-opening hive, the Langstroth style is definitely superior.

To commemorate this hundredth anniversary an attempt is being made to have the government post office authorities strike a stamp with the likeness of L. L. Langstroth.

The Massachusetts Federation of Beekeepers' associations is celebrating the centennial on July 21 with a full day meeting which they hope to make national in character. It will be held at Andover in whose "South Church" Langstroth was pastor from May 11, 1836 to March 30, 1839. It is proposed to unveil a bronze plaque in his memory on that day at the entrance of this church.

Interested readers are invited to send contributions to this memorial to Wallace R. Parker, treasurer of the Association, at West Boylston, Mass.

The Fermentation of Honey in the Hive . . .

The fermentation of extracted honey in storage in the comb has been a cause of economic losses for many years. The above article appeared in the August, 1950, issue of the *Journal of Economic Entomology*. The report is of laboratory studies made on Louisiana honeys during 1947, 1948 and 1949. The authors are C. S. McCleskey and E. Oertel.

They observed active fermentation, resulting in swollen cappings or in some cases the formation of blister-like areas on the combs, only during the summer honeyflow in the vicinity of Baton Rouge, La. Studies of individual sealed honey cells indicated considerable variation between the moisture content and the yeast count of different cells filled during the same honeyflow. The moisture content and yeast counts were considerably lower in the spring honeyflow. They conclude that the fermentation of honey in the comb may be attributed to the high moisture content of the honey when sealed, the high yeast infection, and the high outdoor temperature.

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Queens	2-Pound & Queen	3-Pound & Queen	4-Pound & Queen	5-Pound & Queen	
1-24 -----	\$1.15	\$3.50	\$4.40	\$5.30	\$6.20
25-99 -----	1.05	3.25	4.10	4.95	5.80
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No Charge for Clipping or Airmailing Queens

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Tested Queens \$1.00 Each Extra—Queenless Package, Deduct Price of Queen

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Proven Producers over the years, Tanquary bees and queens assure you gentle, easy to work stock. Tanquary service is courteous and dependable.

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25 to 99 -----	1.10	3.00	3.90	4.75	5.50
100 to 199 -----	1.00	2.75	3.50	4.30	5.00

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TERMS: \$1.00 deposit with order. Balance 10 days before shipment.

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Mansura, Louisiana

ITALIAN BEES AND QUEENS

1951 SEASON

	Queens	2-lb. pkg.	3-lb. pkg.
1-50	\$1.10	\$4.00	\$5.00
\$1-100	1.80	3.75	4.75

Write for prices on larger orders.

Place your orders early.

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2-lb. and queen	\$2.50
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Queen	\$1.00

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Write for prices and shipping dates
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Fourteenth Year of Publication



A Topping of Creamed Honey

Creamed honey, so delicious, and useful in so many ways. Here, on top of pancakes, it starts the day off right. Honey products often sell better than straight honey. (Photo from American Honey Institute)

Honey

We're off to the races!
We came on a bet
That Honey could beat
All competitors yet.

We're off to the races
With confidence high
That Honey will win
With hardly a try.

We brought 'long our stools.
We brought 'long our lunch.
We brought 'long our pennies
To play our sure hunch.

That Honey, a winner.
Is sure to come through
With performance that makes her
A thoroughbred true.

We aren't going into this
Deaf, blind, and dumb.
We know where our shekels
In the past have come from!

We know that our Honey
Can stand up with the best.
And trot away quickly
With the champion's crest.

For one thing we're sure of—
Beekeepers aren't fools!
We know well our product.
We know well our tools.

We won't bet on nonsense.
We need a sure thing.
And we know for a fact
That our Honey's a king!

But 'nuff of this chatter
Let's get back to the race.
Of a victory we're sure
We aren't worried a trace.

We're cocky and sure
That our Honey can cope
With all challenging comers—
At least, so we hope!

We surge through the crowd
And press up to the rail.
We smile for we know
That our Honey won't fail!

The challengers whinny.
Then prance to the gate.
The crowd is all breathless
To learn what the fate

Of each runner will be—
They're off! At the gun
They all dash ahead.
And the race has begun!

We tear up our program.
We chew on our nails.
For Honey, our Honey
Behind them all trails!

As trainers we beemen
Had treated her well.
We'd rubbed down her coat
With those leaflets that tell

How Honey has virtues
That quickly outshine
The rest of the products
Within the same line.

But way in the back
Of our minds we recall
A few of our friends
Who weren't on the ball.

Who neglected to order
A sufficient supply
Of Honey recipe books
For their customers to buy.

Who couldn't be bothered
To put in each store
A Honey display
With a leaflet or more.



Good Bee Yard Trailer

Flat bed; easily loaded; facilitates moving yards or carrying supers. With added top racks, loads may be greatly increased. They also save man power.

Will Win

Who forgot the old maxim
That to sell you must cry
The worth of your product
From here to the sky!

We stamp on our programs,
We pull at our hair,
To think that these beekeepers
Hav'n't been fair

To the rest of the beemen
Who had tried very hard
To talk up their Honey,
Now their record was marred

By this handful of people
Who neglectful had been,
Who had killed by their boredom
Honey's chances to win!

But all is not lost,
Just look at the track!
Honey's closing in slowly
And narrowing the slack!

Now she's pulled along broadside
Of a hard-running mate—
Oh, get along, Honey,
Before it's too late!

With a prayer on his lips
Every beeman arose,
And vowed to repent,
And to pay through the nose

'Till each mother and daughter,
And cousin and aunt,
Shall know of our Honey—
Do without it? She can't!

How often, how often
Has the beekeeper brave
Been told that our leaflets
His market will save.

How often, how often
Have examples been given
Where our leaflets sell Honey
And make better your livin'!

How many, how many
Are the beekeepers smart
Who order their leaflets
To get a head start.

To beat their competitors
To talk up their Honey,
To give them a thorough,
Good run for their money!

But now as we watch
The last lap is in sight,
Honey's putting on speed—
Honey's out of her plight!

Honey's crossed the last line!
Honey's won this fast race!
And a cheer for our Honey
Rose up through the place.

We're happy indeed
To have captured the crown,
But our victory is clouded
As we think with a frown

What we might have been faced with!
How close it had been!
We must start a lot sooner
If we always would win.

So remember, you beemen,
If you don't want to lose,
Distribute our leaflets,
Pay your Institute dues.

And always remember that it's "effort"
that counts,
If you're sincere in your wish your
competitor to trounce!

American Honey Institute
Madison 3, Wisconsin



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Hardy, prolific, rapid
build-up, finest of
workers, GENTLEST
OF ALL RACES — Gentleness is
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near the highway. Gentleness saves
time, sweat, patience and work.
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queens \$1.50 ea. Air Mail. Discount
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ages yet. Beady March 1st. Over
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larger packages add 50c for each ad-
ditional pound of bees.
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to 99, \$1.05; 100, \$1.00 each.

10% books order. Balance 10 days
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Breeders Since 1892

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ITALIAN QUEENS

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TESTED STOCK

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\$1.50 \$1.40

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Northern California

ITALIAN PACKAGE BEES AND QUEENS

	1-24	25 or more
2-lb. pkg. w. q.	\$3.75	\$3.50
3-lb. pkg. w. q.	4.95	4.40
	1-10	11-24
Extra queens 1.50	1.10	1.00

10% books the order. Balance 10 days before shipping date.

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Queens	1.00

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Box 251 Milton, Pa.

This is the Month

by Frank E. McLaughlin

IN the Midwest and farther south if you used light packing such as tar paper for your bees, the packing can usually be taken off in March or April. Those living farther north in colder climate and using heavier packing should wait until more settled weather to remove the packing. If the bees do not have some sort of protection such as a windbreak, do not be too hasty in removing packing. Spring squalls when there are sudden drops in the temperature could prove disastrous. We have lost bees in early spring because of sudden cold spells when the bees didn't have time to move to new stores in the hive.

Although March is sometimes a bad month, there are usually a few days warm enough for the bees to fly. On these days they should be inspected for stores. There should be plenty of honey and pollen in the hives, for it is time for brood rearing to start and stores are used rapidly.

Some beekeepers feed pollen substitute in the spring, especially in localities where spring comes late. Pollen substitute can be made with one part by weight of animal-type brewer's yeast with two parts of expeller - processed soybean flour. Heavy sugar sirup (equal parts sugar and water) is added to the dry mixture to make a heavy paste, but not too soft. Some recommend putting this right over the tops of the frames and covering it with waxed paper to prevent drying. Personally, I do not like this method. Frames get messy enough without the assistance of the beekeeper. Of course, every beekeeper has his own ideas. There is a dry pollen substitute on the market that is used by some beekeepers.

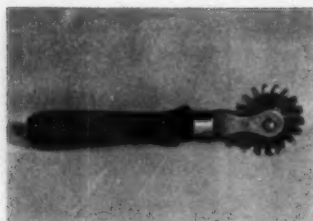
Here in the Midwest plenty of pollen is available when it is needed in the spring. At least, that has been my experience. But in locations where early sources of pollen are available, it sometimes is necessary to feed sirup, if colonies are low on stores, as a large amount of spring losses are caused by shortage of stores.

Among the nectar sources that bloom in early spring are soft maple and different types of willow. Pussy willow is an early source of pollen. When dandelion blooms the bees work it well and they visit it all the time it is blooming.

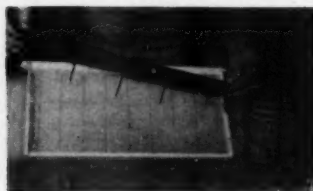
If you want your bees to be in condition to bring in abundant surplus of honey, they must have plenty of stores to carry them through to the time for the honeyflow. If your bees need feeding keep the feed on them constantly as long as they need it. Use one, one and sevenths grain sulfathiazole tablet to each gallon of sirup as a preventive for foulbrood. When supers are placed on the hive, the use of sulfa should be discontinued until they are removed.

Care should be taken when examining bees in the early spring to avoid robbing. If robbing starts, close up the colony immediately. Be sure the entrance cleat is on the hive, using the reduced opening. This helps to keep robbing down, as it permits the bees to protect themselves.

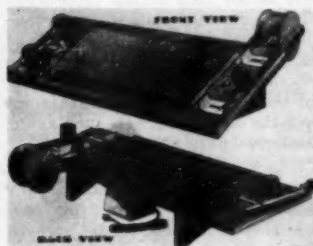
For the beginner who is assembling and nailing equipment for the first time, it is very essential to wire the frames correctly before install-



The roller embedder.



The electric wire embedder.



The use of a wiring board makes wiring frames easier.

ing foundations. Don't let someone tell you that it isn't necessary to wire the frames. Wiring prevents sagging and stretching of combs to a great extent, and also helps prevent breaking of combs when extracting. Frames should be wired just before installing the foundation. Sometimes when the wiring is done and the frames are laid away for some time, the wire will become loose in the frames.

The best way to wire frames is by the use of a wiring board. This board has spindles or spools on it, that turn easily as the wire is pulled through the holes in the frames. The frame is laid on the board with top bar next to the person doing the wiring, the spool of wire on the right hand side. Thread the wire through the first right hand hole next to the top bar, on through the first hole on the left hand side, up the side bar to the second hole. Proceed in this

manner until wire has been threaded through all holes. Start a small nail in the end bar, wrap the end of the wire around the nail several times, and drive the nail down. That fastens one end. Stretch the wire tight and fasten the other end by wrapping it several times around the nail. Drive the nail in, and cut the wire.

Wire can be embedded in the foundation by an electric embedder or by a little roller embedder. I much prefer the electric wire embedder. It is much faster and does a much better job. I made mine myself, but they can be purchased already made.

I recommend using eyelets in the holes in the frames, where the wire goes through. Eyelets can be ordered from your equipment catalog along with the eyelet punch. The use of eyelets prevents the wire from cutting into the frames when it is pulled tight.

The beginner beekeeper will learn that the temperament of the bees being worked largely depends on weather conditions. The best hours in the day are from ten in the morning until four in the afternoon. It is an ideal day when it is warm and the sun is shining. The beginner must learn when to use smoke and how much to use. Bees are more cross right after or before a storm or on chilly days. Fast motions, awkward movements, dropping frames, or jarring the equipment antagonize the bees. Strong smelling powders, perfumes and hair oil also make the bees want to sting.

In the spring bees require more water than they do when there is honey coming in. They like to get water from bird baths and moist sand, but they will get it from any available source. This makes it advisable to fix a watering place for your bees if there are no natural water supplies such as creeks or ponds within one-fourth mile or so. In making a watering place it is better to have a slow trickle on sand, or something similar, than to have water setting in a pan for a long period of time. If the pan is emptied and washed out regularly, a pan with chips or small pieces of wood in it to keep the bees from drowning is all right. A regular chicken watering can with the water container turned upside down over the trough can be used. Sand can be put in the little trough to keep the bees from drowning. The can should be washed out regularly and fresh water used.

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2-lb. with queen	\$3.50	\$3.25
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Golden Italian Bees:

Very good honey gatherers and very gentle.

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Queens, untested	1.00 each
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2-lb. package	\$3.50
3-lb. package	\$4.50
Queens	\$1.25 each

John S. Shackelford
Rio Oso, California

Why don't my bees fill their sections and frames with honey, although they apparently are working on clover and other blossoms?

C. S. Huston, Illinois

There may be some spraying in your locality which has destroyed some of the field bees, although your colonies would appear weak if this had happened. Our surmise is that the clovers and other blossoms in your locality are not as plentiful as usual and possibly have not yielded well due to cool weather. Frequently you may see the fields white with clover and yet the bees harvesting very little honey. In order for them to harvest plenty of nectar, the climatic conditions must be right. Hot, humid weather during the honeyflow produces the best crop.

Do bees customarily raise drones in the winter?

T. J. Sherrill, N. Carolina.

Ordinarily bees do not raise drones at this season nor do they carry them over winter. If you are having warm weather they might possibly be getting ready to swarm and are raising drones for young queens which might emerge at swarming time. More than likely, you have a queenless colony. We suggest going through the colony to see if there is any other brood and to find the old queen and kill her. Then introduce a new queen which can be purchased very shortly from any southern breeder.

Can grasshoppers be poisoned in an alfalfa field without poisoning the bees or their honey?

Bessie M. McDonald, Nebraska

The control of harmful insects appears to be considerably simplified through the use of new insecticides now available. For grasshopper control two chemicals which have been thoroughly tested are chlordane and toxaphene. If these are applied as

sprays or dusts early in the morning and late in the evening and when alfalfa is not in bloom, a minimum of harm will result to honey bee colonies. If the chemicals are used in bait formulas it is questionable whether the bees will be affected at all.

The Division of Bee Culture reports that the new insecticides kill only the field bees which are in the field at the time of the application. Of the chemicals listed, chlordane killed 23% of the visiting bees and toxaphene killed only 8 and 2% in two tests. This is a much less harmful result than has been obtained with the other chemicals such as the arsenicals, parathion, and DDT.

Only if the blossoms were sprayed in full bloom would there be any possibility of the honey being contaminated. If alfalfa is sprayed early in the morning, or late in the evening, and is not sprayed when in bloom, there is no serious likelihood of contamination.

What is heartsease? Is there a correct common name for most plants?

Frank F. Johnson, Indiana.

There is endless confusion in the common names of plants. The name that means one thing in one neighborhood will be applied to an entirely different plant elsewhere. The name heartsease is commonly applied to the wild pansy, (*Viola tricolor*) by gardeners. Some others beside beekeepers refer to the common species of polygonum which is also known commonly as "ladies thumb." In Australia species of *gratiola* are called heartsease while in some countries the name is given to the wallflower. According to the books the self-heal is sometimes known as heartsease.

Most of the books within my reach refer to some species of *Bidens* under name of Spanish needle. This group

also has a variety of other common names including, bootjack, beggartick, stick-tight, etc. The bur-marigold is the name commonly used for a variety without the sharp appendages on the seeds. Numerous other plants are also known as marigold including some flower garden annuals of the genus tagetes. It is because of the great variety of common names that it is necessary to give also the scientific name to make sure of the identity of a particular plant.

What is the best way to get rid of yellow jackets when they are molesting hives?

Charles Hofmann, Illinois

Close down the entrance to the hive to a single bee space if possible. Next hunt out the yellow jacket nests and destroy them with sulphur fumes or cyanide gas. The county agent can help you with this. Cyanide is deadly poison to man but if a little is dropped in the yellow jacket nest in the open air and the entrance to the nest closed up there is no danger. Yellow jackets usually nest either in a hollow tree or a hole in the ground.

The third alternative is to poison them. Build a little trap with sugar sirup or honey in it and the entrance sufficiently small so that the yellow jackets can enter but not the bees. Place this near the colonies and let the yellow jackets feed for a day or two, then put a little Paris Green or some other poison in the feed and they will take it, thus destroying the bulk of the adults.

What yard flowers are best to plant for nectar sources?

Thomas Wilks, Oklahoma

A good idea when sowing grass seed is to sow white Dutch clover along with it. This is a fine source of nectar. As for flowers, tame asters appeal to bees and they will also work marigolds, petunias and bachelor's buttons. All the clovers are good, yellow, sweet, Dutch and alsike. Some good shrubs for pollen and nectar are the pussy willow and Vitex. Good tree sources are the linden or basswood, black locust, tulip tree and fruit trees. Wild asters, heartsease, Spanish needle and goldenrod are good nectar sources also. Other suggestions may be obtained from Pellett Gardens, Atlantic, Iowa.



LADYLIKE mountain gray Caucasian bees

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HOW TO HANDLE CAUCASIAN BEES

CAUCASIAN APIARIES

Castleberry, Ala.

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ESTABLISHED 1883

Maximum production is most easily assured with superior bees and queens. That's the one way we try to help you make money. Superior bees and queens is our motto at all times. We like to have 50 per cent deposit and balance before shipping date. We believe this is fair to all—as we like to plan and ship the day you want shipment. Price scale:

Queens, any number	\$1.50—Tested Queens \$2.00
2-lb. package and queen	\$2.00 any number
3-lb. package and queen	4.00 any number

THE VICTOR APIARIES

Uvalde, Texas



KELLEY—"The Bee Man"

2-LB. SWARMS WITH YOUNG QUEENS	\$3.50
3-LB. SWARMS WITH YOUNG QUEENS	4.50
QUEENS (PREPAID AIRMAIL), EACH	1.10
25 OR MORE 2-LB. SWARMS	2.85
24 OR MORE 3-LB. SWARMS	4.25

THE WALTER T. KELLEY CO. Box 210, Paducah, Ky.

HOWARD WEAVER'S Caucasian Package Bees & Queens

	Queens	2-lb. Pkg. W. Q.	3-lb. Pkg. W. Q.
1-24	\$1.50	\$3.50	\$4.50
25-49	1.10	2.85	4.25
50 & up	1.00	2.00	4.00

Package bees are express collect; but on small orders parcel post effects considerable saving over express charges. I will be glad to figure your parcel post charges for you.

HOWARD WEAVER

Navasota, Texas

PACKAGE BEES—ITALIAN BEES and QUEENS

On the same old basis—QUALITY, SERVICE, SATISFACTION

Live delivery guaranteed on all shipments. 10% deposit books any order.

2-lb. pkg. with queen	\$2.75
3-lb. pkg. with queen	3.75
4-lb. pkg. with queen	4.75
Queens	.50

Write for discount on orders over 50 packages

E. J. BORDELON APIARIES

Box 33, Moreauville, Louisiana

PACKAGE BEES AND QUEENS



DADANT'S STARLINE HYBRIDS and MY OWN STRAIN OF ITALIANS

Italians		
	1-24	25-99
Queens	\$1.20	\$1.10
2-lb. pkg. w. q.	3.50	3.25
3-lb. pkg. w. q.	4.25	4.00

Starline Hybrids		
	1-24	25-99
Queens	\$1.45	\$1.35
2-lb. pkg. w. q.	3.75	3.50
3-lb. pkg. w. q.	4.50	4.25

Queens postpaid, airmail if it saves time. Packages by express or truck. Let me figure with you on loading out your truck with packages that will please you.

Rev. Father Clement Nordus of St. Benedict's Abbey, Atchison, Kans., writes, "Your packages are all that I could expect; they have done well for me."

Try them and be convinced that they will do for you what they have for many others.

*Only a few choice shipping dates left
so rush in your order today!*

S. J. Head Crossett, Arkansas

HONEY BEESWAX SUPPLIES

SUPERIOR HONEY COMPANY

**FOUNDED FOR THE BEEKEEP-
ING INDUSTRY OF THE WESTERN
UNITED STATES.**

**A MARKETING OUTLET FOR ALL
TYPES OF YOUR HONEY.**

**A MARKETING OUTLET FOR YOUR
BEESWAX.**

**A SOURCE FOR YOUR SUPPLIES AND
EQUIPMENT.**

We are in business to serve you.

Visit our plants.

**Ogden, Utah; Idaho Falls, Idaho; Denver, Colo-
rado; Los Angeles, California; Phoenix, Arizona;
and our Wood Goods Mill in Madera, California.**

How - to - do - it

How to Remove Poisoned Pollen

In boll weevil areas, where arsenic dust is used for control, the poison stored with the pollen causes colonies to dwindle and die. Jesse Gooch, Pine Bluff, Arkansas, found 40 colonies like this, with just enough field bees left to protect the combs. He dipped each comb into warm (not hot) water in which several packages of baking soda had been dissolved, leaving the combs in several minutes to soften the pollen. He then shook each comb to dislodge the excess water before putting the comb back in the hive. Frames of sealed brood treated this way showed no injury to the brood. The pollen was removed by the bees and the colonies were on the way to recovery.

(From Apiary Board Bulletin, Little Rock, Arkansas, August 1950)

Moving Hives

We use a simple device—two six-foot lengths of parachute webbing with a 2½ inch iron ring strongly attached at each end. They are placed underneath the floor-board of the hive at right angles. A pole through the four rings is carried on the shoulders of two men. The tension adjusts itself so that no fixing together of the hive parts seems necessary. Hives can be quietly moved and let down onto a new position.

C. Wentworth-Levy, Kent, England.



Fixed Up Right . . .

Julie Francis (age five) sends this picture of a colony set on a wooden hive stand well up from the ground. The top bricks help keep the cover on and by position may serve as markers for colony condition or needs. This is a beautiful spot too for the bees; partial shade, attractive surroundings.



Everyday Advertising . . .

Russell Griggs (Iowa) uses these two well-groomed trucks, "Madam Queen" (the big one) and "Little Worker" (the pickup). There are five paint colors on each car sign, one reflective chromium. When these buzz around town and countryside, everyone knows who has honey and, too, a good clean truck makes you feel good.

Burn Those Insect Pests! . . .

For the first time since I started as an amateur beekeeper at the early age of 10 years, I have had no trouble with wax moths during a whole season.

I applied an old but novel method. One of my friends had a few pecan trees that were being ravaged by night-flying beetles, and he ended the menace to his pecan crop by pouring water into his rowboat until it was half full, putting a small quantity of kerosene in the water, and then placing a 300-watt electric light bulb over the water. He put a heavy sheet of cardboard back of the boat to act as a bouncing board to throw the beetles into the water as they flew rapidly at the light at night.

I reasoned that wax moth flies also become very active after dark, and that almost any night-flying moth or beetle will naturally head straight to a light. So I started piles of brush and waste material near my apiary. At regular intervals when the weather was suitable for the material to burn, I set fire to the brush. Many moths and beetles flew to their destruction in those flames.

Ralph Underhill, Arkansas

It's News!

In order to prevent my bees from flying out and losing themselves in the snow, I have taken a tip from Dr. Miller's suggestion, "Keep the cellar dark, for light causes bee activity." In order to keep the entrances of the packing cases dark I lean shade covers (wooden panels 2½ x 3 feet) against them so as to exclude the light from the entrances. These panels not only keep the bees from flying but they keep the entrance dry, keep out wind and prevent moisture from collecting in the hive. When a good day comes it is but a minute's work to remove the panels and the bees get their flight with no loss in population.

Joe Marty, Oregon

— ORDER EARLY —

Lotz Sections and Comb Honey Supplies

★ ★ ★

Hives, Frames, and Foundation

★ ★ ★

Containers

Tin Pails and Cans

Glass—Economy and Queenline

★ ★ ★

Write for prices

AUGUST LOTZ COMPANY

Bee Supply
Manufacturers and Jobbers

Boyd, Wisconsin

Three-Band Italian Package BEES AND QUEENS

and Pure Italian Three-way D. R.

Queens

Full weight, prompt shipment. Young bees. State health certificate with each shipment. Live arrival guaranteed.

Replacement or refund made promptly upon receipt of bad order from your express agent.



1951 PRICES

WITH YOUNG LAYING QUEENS

	2-lb.	3-lb.	4-lb.	5-lb.
Lots of 1 to 29	\$3.00	\$3.75	\$4.50	\$5.25
30 or more, each	2.75	3.50	4.25	5.00

Tested queens \$2.00 each.

Untested queens \$1.00 each.

For introduced queen add \$1.00 per package. If queenless bees are wanted deduct \$1.00 from the package price.

JACKSON APIARIES

Funston, Georgia, U. S. A.

ITALIAN BEES AND QUEENS

	2-lb. with queen	3-lb. with queen	4-lb. with queen	Untested Queens 1.00
1-24	\$3.50	\$4.50	\$5.50	Tested Queens 2.00
24-99	3.25	4.25	5.25	
100 up	3.00	4.00	5.00	

Guaranteed to Satisfy

GOLD LEAF APIARIES

P. O. Box 232

—1—

Mahira, Georgia

PACKAGES

SUNKIST

QUEENS

We offer Kelleys Island Hybrid queens in addition to our regular light colored Italians. Guaranteed live delivery, young laying queens, satisfaction. Shipments start about March 20. Express or parcel post.

	1-24	24-50	50-Up
2-lb. with queen	\$3.50	\$3.25	\$3.00
3-lb. with queen	4.50	4.25	4.00
Queens — each	1.10	1.00	0.90

SUNKIST BEE COMPANY

Convent, Louisiana

IMPROVED ITALIAN QUEENS and PACKAGE BEES

We ship only young working bees.
Prompt Delivery

	Queens	2-lb. with queen	3-lb. with queen
1-25	\$1.10 each	\$3.50	\$4.50
25 up	\$1.05	\$3.40	\$4.40

THE CHEROKEE BEE CO.

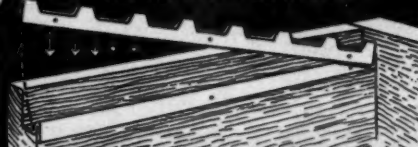
Cordele, Ga.

STOLLER *Slip-on* FRAMESPACER

LESS WORK

MORE PROFITS

Now used everywhere as essential equipment. Sixteen styles to fit any standard frame. Write for details, prices.



STOLLER *Honey Farms* LATTY, OHIO

BEES O. K. FAMOUS QUEENS, \$1.25

Express Collect

By Airmail

PRICES:

2 lbs.	\$3.25
3 lbs.	4.00
4 lbs.	5.00

New customer's limit 25

O. K. ANDERSON & SON APIARIES

Box 193

—3—

Coffee Springs, Ala.

NEWSREEL



What About Hive Heating?

E. H. Forby of South Dakota sends us an interesting proposal worth consideration. He says considering winter losses and severe cold in spring, more research in the use of artificial heat is in order. Controlled experiments by a central agency or by individuals chosen or volunteering for experiments in a coordinated plan are suggested. Some of the angles of the problem that might be considered are: Effectiveness and cost of heaters. Location and methods of applying heat, whether continuous, or applied at timed intervals. Results of such studies would be worthwhile. Here is a good project for some of our beekeepers' associations or other organizations to sponsor.

Bees Help Vetch Seed Yield in Texas

Surveys made in North Central Texas indicate that the presence of honey bees in the vetch fields increases the seed yield materially. Where 1 to 3 colonies per acre were within one-half mile, yields ran as high as 1277 pounds to the acre or 229 per cent over similar areas where no bees were found within two miles of the acreages.

A. H. Alex, Dr. F. L. Thomas and Bert Warne of Texas A. & M. College were responsible for the surveys. Recommendations have been made for a rental and share seed crop basis between seed producer and beekeeper, but so far the farmers seem more inclined to rent bees at a cost of \$2.50 to \$5.00 a colony.

Fungus Causes Winterkill

Another popular notion is being exploded by research. It is the idea that much of the winterkill of legumes is the result of freezing. Winterkill, say scientists, is caused by a cold weather fungus known as crown rot and stem rot. Hope is that this microscopic enemy can be licked by development of resistant plants.

Studies show that the fungus does no harm when temperatures are above 80° and little harm at 70°, but from 70° down almost to freezing, it is straight poison.

J. H. Sturdevant,
Nebraska.

Encourage Pollination Projects

"Beekeepers must get out and sell pollination. It can be done. There are two key men in nearly every county; the county agent and the soil conservation man. Both, if not sold on bees, usually are easy to sell and can direct beekeepers to good contacts.

It is becoming easier to sell pollination, which may lead to a trend towards larger beekeepers, rather than the effort being made by smaller beekeepers or backlotterers.

One important item; initial trials or starts should be made in isolated fields where there are not too many competing nectar plants to compete with the plants to be pollinated. After that we can sell entire communities or at least several adjoining farms."

Wm. Wicht, Mississippi

New Jersey Pollination

New Jersey ranks high in her recognition of pollination as an aid to better seed and fruit set. Already the cranberry bogs and cultivated blueberry acreages are cognizant of the value of bees in pollination, and the recompense for such pollination has been placed at a point where the beekeeper can afford to count pollination as a profitable adjunct to his apiary operations.

R. S. Filmer of the New Jersey Experiment Station reports a request from the large lima bean growers that positive data be determined on the influence of honey bees on lima bean production. Experiments are also to be conducted on the honey bee's value to Atlantic alfalfa in the hopes of producing more seed of this variety especially suited to eastern conditions.

A Beekeeper's Progress

The above is the title of a 142-page clothbound book written by E. R. Bent and published by Gale & Polden of Aldershot in England. The price is \$2.00 (12s 6d).

In the main the book is a recitation of the activities of the author in learning beekeeping in all its ramifications. It is at the same time a good book for beginners and a pleasant and informative one for the older beekeeper. While Mr. Bent naturally approaches his subjects from the British point of view he has given ample credit to the points in North American beekeeping which may well be kept in mind as helps anywhere.

March, 1951

A New and Better . . .



STARLINE HYBRID

Produced under natural conditions by approved methods. Write for prices.

J. M. CUTTS & SONS



Chipley, Florida

SPEAR'S QUALITY BRED ITALIAN BEES AND QUEENS

When you buy our Quality Bred Italians you are guaranteed young laying queens, prompt service and the assurance of the quality you have been looking for so long. Our bees are not bright yellow, but dark enough to be excellent honey producers and peaceful to work with. We are now booking orders for 1951.

Write for prices including shipping dates desired, number and size of packages, and number of queens.

SPEAR'S APIARIES

Hamburg, Louisiana

Knight's Three-Banded Leather Colored

ITALIAN BEES AND QUEENS

	Queens	2-lb. pkg.	3-lb. pkg.	4-lb. pkg.	5-lb. pkg.
1 to 24	\$1.80	\$3.50	\$4.50	\$5.50	\$6.50
25 to 49	1.10	3.25	4.25	5.25	6.25
50 and up	1.00	3.00	4.00	5.00	6.00

For queenless packages deduct the price of the queen.

Prompt Service

Young Laying Queens

Full Weight Packages

Your Satisfaction Guaranteed

NO CHARGE FOR CLIPPING

JOHN T. KNIGHT

Hayneville, Ala.

Brazos Valley Apiaries
Cameron, Texas

Bees and Queens

Brazos Valley Apiaries
Cameron, Texas

ITALIAN OR CAUCASIANS

	1 pkg.	1 or more
2-lb. bees with young queen	\$3.00 each	\$2.75 each
3-lb. bees with young queen	4.00 each	3.65 each

Over a quarter century in the same place, same business, under the same name, is my record. My motto: I expect to do business with you again.

H. E. GRAHAM

Cameron, Texas

THREE-BANDED ITALIAN BEES AND QUEENS

2-lb. pkg. with queen	\$3.50
3-lb. pkg. with queen	4.50
Queens	1.00

Discount on 20 or more.

GEORGE O'NEILL & SONS

Haines City, Florida

Gaspard's Quality

ITALIAN QUEENS PACKAGE BEES

We are now booking orders for spring 1951. Live delivery guaranteed and health certificate accompanies each shipment. 20% books your order, balance 10 days before shipping date. A young laying queen in each package.

2-lb. pkg. with queen	\$4.00	4-lb. pkg. with queen	4.50
3-lb. pkg. with queen	3.50	5-lb. pkg. with queen	5.50

10% discount on 25 packages or more. For comb packages add \$1.10 per package.

GASPARD BEE CO.

Hessmer, La.

Use ABJ Labels—They Get Results

BETTER BRED QUEENS

THREE-BANDED ITALIANS

Your production is our greatest desire. Our Better Bred Stock will do the job. They are backed by years of experience. Plenty of efficient help. Large Capacity.

	2-lb. package with queen	3-lb. package with queen
1 to 24	\$3.25	\$4.25
25-99	3.00	4.00

Queens, any quantity — \$1.00 each

CALVERT APIARIES

CALVERT, ALABAMA

POLLEN SUBSTITUTES

	5 lbs.	10 lbs.	25 lbs.	50 lbs.	100 lbs.
Brewer's Yeast and Soy Flour (expeller) mixed	\$1.00	\$2.00	\$4.50	\$8.50	\$16.00
Brewer's Yeast	1.50	3.00	5.50	10.00	18.00
Soy Flour (expeller)	1.50	3.00	5.50	10.00	18.00

Send Parcel Post charges if you want shipment by mail.

Please allow two pounds extra for packing. All other orders sent collect.

Five-gallon tanks with faucet in the bottom, \$3.95 each, PREPAID.

M. Y. S. COMPANY — Bainbridge, N. Y.

ITALIAN BEES AND QUEENS

For Quality and Service — Shipped When You Want Them.

	Queens	2-lb. with Queen	3-lb. with Queen
1-24	\$1.10	\$3.50	\$4.50
25-99	1.00	3.25	4.25
100 up .....	.90	3.00	4.00

HOMAN BROTHERS

Tel. 4295

R. F. D. 2

Shannon, Miss.

PACKAGE BEES AND QUEENS

"ITALIANS"

	1-lb.	10-99	100-Up
2-lb. pkg. with queen	\$3.25	\$3.00	\$2.85
3-lb. pkg. with queen	4.25	4.00	3.80
4-lb. pkg. with queen	5.25	5.00	4.75

We guarantee live delivery, a health certificate with each shipment and service on which you can depend. Shipments by Express or Parcel Post.

Quality Does Not Cost — It Pays!

THE WILBANKS APIARIES

Claxton, Georgia

PLANT'S THREE-BANDED ITALIANS

Productive, Gentle, Easy to Handle

Queens are young, laying and first quality. New, light weight packages. No disease here, health certificate with all shipments. Live, full weight arrival of young worker bees.

Quantity	Queens	2-lbs.	3-lbs.	4-lbs.	5-lbs.
1 to 24	\$1.25	\$3.50	\$4.50	\$5.50	\$6.50
25 to 99	1.15	3.25	4.25	5.25	6.25
100 up	1.10	3.00	4.00	5.00	6.00

Each package has a young laying queen.

Queens are postpaid. Packages by express F. O. B.

W. E. PLANT

Hattiesburg

Route 2

Mississippi



NEWSREEL

New Insecticide Compound

Nebraska Bee Tidings reports a new compound, Pestox 3, which is a systemic insecticide, that is, it is absorbed by the leaves of the plant and then is translocated to other parts by traveling in the sap stream. One of the great advantages of systemics over the old type insecticides is their translocation to the growing point of the plant, because new growth which was not in existence at the time of spraying is rendered toxic to pests. Some seed, when dipped into Pestox 3, will produce plants which remain toxic to insects for a certain time, depending on the time of year and the activity of the plant. In a period of slow growth toxicity lasts longer than in a period of rapid growth. When applied to the soil around a plant, Pestox 3 is taken up by the roots and translocated to the foliage. It is not yet known whether blossoms sprayed with it are toxic to honey bees.

The Foraging Methods of Individual Honey Bees

An interesting reprint from the Journal of Animal Ecology, May, 1949, (printed in Great Britain) is a 16-page article on the foraging methods of individual honey bees by C. R. Ribbands of the Bee Research Department, Rothamsted Experimental Station in Harpenden.

It was found that bees chose special parts of the beds when working the flowers and even special flowers in a bed, apparently using both memory and choice. Sometimes attachment to a specific flower was for the life of the flower and sometimes only for a small space of time. Very often bees changed over from pollen gathering to the nectar crop but never vice versa. Nectar gatherers made from 250 to 1446 individual visits to flowers per load whereas with pollen the number of flowers visited ranged from 7 to 120 visits per load. The number of visits to take a load of pollen is, according to Mr. Ribbands, no index of the pollinating capacity of the bee as foraging "is often mainly composed of off-repeated visits to favorite blossoms. The size of the foraging area is a more correct index of pollinating capacity."

Did You Get Your February ABJ?

Our February issue was tied up along with a lot of others in the recent rail strike which caused an embargo on second class mail. We are sorry your Journal was late, but there was nothing we could do until the embargo was lifted. If you have not received your February issue by the time you get this one, please let us know.

Bees and Ladino

Davis-Ladino clover does not produce enough nectar to support more than one or two colonies of bees to the acre.

Investigators in the U. S. D. A. Bee Culture laboratory at the University of California Agricultural Experiment Station have reached this conclusion after observations of bee activity on Ladino clover plants at Davis.

Farmers who raise this clover for seed—and some 30,000 acres are producing nearly four million pounds of Ladino seed in California this year—depend upon the bees for its pollination.

"The principal interest of the bees seems to be in the pollen," says G. H. Vansell, who is in charge of the pollination studies. "And to prevent danger of actual starvation," he added, "they should receive supplementary feed where many colonies are used. A colony of bees requires 60 pounds of honey to carry it through the winter."

Wilt-Resisting Alfalfa

Chief advantage of wilt-resistant alfalfa such as Ranger and Buffalo is ability to maintain a good stand over longer periods. Thickness of stand was reduced no more than 3 per cent over a 3-year period on any of 5 varieties—Atlantic, Buffalo, Ranger, Grimm and Kansas common in an Indiana station test.

By the fourth season, however, Kansas common had dropped 19%, Atlantic 23 per cent and Grimm 27%. Buffalo and Ranger stands had fallen only 8 and 11 per cent respectively. Hay yields in tons for the first and fourth season for the 5 varieties were as follows: Atlantic 5 and 3.8; Buffalo 5 and 4.9; Ranger, 4.7 and 4.7; Grimm 4.5 and 2.6; and Kansas 4.7 and 3.2.

J. H. Sturdevant,
Nebraska



MILLER REARED-DADANT STARLINE HYBRID QUEENS

A New Line of Resistant Bees
BRED IN ISOLATED YARDS

Starline Queens 1-24, \$1.45; 25-99, \$1.25; 100 up, \$1.30
Italian 1-24, \$1.50; 25-99, \$1.10; 100 up, \$1.00

JOHN G. MILLER, 723 6th St., Corpus Christi, Texas



LIGHT ITALIAN BEES AND QUEENS

Easy to work with, vigorous honey bees. Can ship promptly any dates in April.

2-lb. package with queen \$3.90
3-lb. package with queen 4.75
Extra queen 1.00

NEAL'S APIARIES

Box 46, Hamburg, La.



MACY ELECTRIC UNCAPPING KNIFE

NOW MADE IN TWO MODELS:

No. 101 with thermostat

No. 102 with control box

Either Style, \$15.00

HUTCHISON MFG. CO., Licensed Mfr.

3006 E. SEPULVEDA BLVD.

LOS ANGELES 25, CALIFORNIA

ITALIAN PACKAGE BEES AND QUEENS

Write for Quotations

B. J. BORDELON APIARIES—Moreauville, La.

A GOOD BUY

Lowest possible price on first quality bees.

THREE-BANDED ITALIANS

2-lb. package with young laying queen	.....	\$3.00	Any number
3-lb. package with young laying queen	.....	4.50	Any number
4-lb. package with young laying queen	.....	5.00	Any number
5-lb. package with young laying queen	.....	5.00	Any number
Extra queens (postpaid)	.....	1.10	Any number

Package price includes a queen and are F.O.B. No C.O.D. by parcel post.

SUNRISE APIARIES

Petal

Mississippi

Package Bees and Queens : Bright 3-Banded Italians

NOW BETTER

We Guarantee Safe

Arrival

Packages F. O. B.

Queens Prepaid.

1 to 24

25 to 99

100 up

Package Bees with Queens

Queens

2-lb.

3-lb.

4-lb.

5-lb.

\$2.50

\$3.50

4.50

5.00

3.00

TAYLOR APIARIES

Box 249, Luverne, Alabama

Dovetailing Machine

FOR MAKING BEE HIVES AND
SUPERS. NOW A SIZE FOR
EVERY BEEKEEPER'S SHOP.
DETAILS ON REQUEST.

Carl E. Johnson Co.

1567 GREGORY AVENUE
LINCOLN PARK 25, MICHIGAN

FLOWERS' QUALITY ITALIANS

That will stand the test for honey gatherers, gentle, prolific. Our motto is to serve you with the best young bees and queens money can buy. Ask our customers. State health certificate with each shipment, prompt live delivery guaranteed. Replacement or refund made promptly upon receipt of bad order from express agent. No orders too large or too small, shipped when wanted. Place orders early.

Packages with young queens F.O.B.

2-lb. Package	.....	\$2.75
3-lb. Package	.....	\$3.40
4-lb. Package	.....	\$4.15
5-lb. Package	.....	\$4.80
Extra Queens	.....	\$1.00

FLOWERS BEE COMPANY

Jesup, Georgia

YORK'S PACKAGE BEES AND QUEENS QUALITY BRED ITALIANS FOR 1951

The Strain Preferred by Leading Honey Producers

Package Bees With Queens

Quantity	1 to 24	25 to 99	100 up
2-lb. Pkgs. ---	\$3.50 each	\$3.25 each	\$3.00 each
3-lb. Pkgs. ---	4.50 each	4.25 each	4.00 each
4-lb. Pkgs. ---	5.50 each	5.25 each	5.00 each
5-lb. Pkgs. ---	6.50 each	6.25 each	6.00 each
Queens -----	1.10 each	1.05 each	1.00 each

Queenless packages deduct \$1.00 per package.

Tested Queens \$1.00 Extra

Place orders now for shipping
dates wanted.

YORK BEE COMPANY

Jesup, Georgia, U. S. A.

(The Universal Apiaries)

JENSEN'S

QUALITY BEES AND QUEENS
PLUS SERVICE

Our aim is to make you a satisfied customer. Failure to do this we both lose. Prices effective April 1. For shipment as soon thereafter as weather will permit, and good queens become available from our queen yards. Remember—everything depends on the quality of the queens.



Packages:	2-lb. W/Qs	3-lb. W/Qs	For Dadant's Starline Hybrid Queens add 25c per Package.
1-24 -----	\$3.50	\$4.50	
25-99 -----	3.25	4.25	
100-up -----	3.00	4.00	

F.O.B. here via Express, Parcel Post, or loaded your trucks.

	"Magnolia State" Italians	Dadant's Starline Hybrids
Queens		
1-24 -----	\$1.25	\$1.50
25-99 -----	1.15	1.40
100-499 -----	1.10	1.35
500-up -----	1.00	1.25



Jensen's Apiaries, Macon, Miss.

"The Business Quality and Service Built."



ITALIAN QUEENS — PACKAGE BEES

	1 to 49	50 to 99	100 and up
2 lb. with queen	\$3.50	\$3.25	\$3.00
3 lb. with queen	4.50	4.25	4.00
4 lb. with queen	5.25	5.00	4.75
5 lb. with queen	6.00	5.75	5.50
Italian queens	1.10	1.10	1.00

Package bees are shipped with full liberal over-weight and live arrival guaranteed. Our dealings with you must be 100% satisfactory. Replacement or refund on any shipment when bad order receipt is received by us. Our queens are second to none in performance. Queens clipped on request and sent airmail postpaid.

GEO. A. HUMMER & SONS

Established 1892 Western Union—Macon, Miss. Prairie Point, Miss.

Ship Your
HONEY & BEESWAX
to us. Top prices paid, prompt remittance. Also welcome your old comb shipments to be rendered into wax at very nominal charge.

THE FRED. W. MUTH CO.
229 Walnut Street
CINCINNATI 2, OHIO

CAUCASIAN

Queens and few packages, prices on inquiry.

D. T. WINSLETT

7736 Auburn Road
Citrus Heights, Calif.

PACKAGE BEES AND QUEENS

I Have ITALIAN Bees

Full weight, prompt shipment, live arrival guaranteed. Health certificate with each shipment.

Book your orders early.

2-lbs. with queen	\$3.50
3-lbs. w/ 1 queen	3.90
4-lbs. with queen	4.75
Queens	\$1.00 each

Raymond McFarling
Shannon, Miss.

SAM E. MOORE

NORTHERN CALIFORNIA'S
QUALITY ITALIANS

2-lb. pkg. w. Select Queen	25 up 1.34
3-lb. pkg. w. Select Queen	\$3.50 \$3.75 \$4.40 \$4.65

SELECT PERSONALLY
RAISED QUEENS

1-10, \$1.30; 11-24, \$1.10; 25 up, \$1.00

SAM E. MOORE

2430 North St., Redding, Calif.

All Around The Bee Yard

by G. H. Cale

Cook-Dupage County Association has set a record and a mark for all similar groups to follow. Friday and Saturday, February 9 and 10, at the Chicago Museum of Science and Industry, this vigorous, hard-working bunch sponsored a short course for beekeepers with an open invitation for attendance. Two hundred or more responded in the nastiest weather imaginable. It was so cold and windy you could frost your cheeks in two blocks. The snow fell and ice and wind contrived to buffet both people and cars. Yet they came. The Museum is at 57th Street and Lake Michigan; within the building guides took us through a labyrinth of wonders to the assembly hall. Only strictly educational meetings are allowed but this was educational and the Museum staff went all-out to help. In any intervals allowed us the Museum was in itself a marvelous display of history and invention, science and wonders. A week in the Museum is not enough to digest all it has to offer the mind and heart of the visitor.

So much for the setting. While this short course was entirely sponsored by the Cook-Dupage Association, the University of Illinois staff gave able assistance in its preparation and in carrying out the details. The teaching staff was a drawing card—Dr. Dunham, from Ohio; Dr. Milum from the University of Illinois; the assistant Provincial Apiarist of Quebec; Carl Killion, Chief Apiary Inspector for Illinois; M. J. Deyell, Editor of "Gleanings"; Art Kehl of the G. B. Lewis Co.; and your humble writer of this page, who, by the way, learned perhaps more than most at this course. It was a day and night affair. No time for loafing.

Now, can some of you other associations top that? It's a challenge and it's a real function of an association; there are many other projects for a live association but education is the main job. This was in no sense a convention. It was from start to finish a school. As President Baker said, "Although we planned this thing, I had no idea what it would be like. I'm bubbling over every minute." And that's exactly the feeling with which it filled you.

I have heard Carl Killion talk for years about how he produces section comb and bulk comb honey and have read advanced proof of his new book "Honey in the Comb" but each time I hear him I learn more of his ways and it leaves me with the wish that I could do some of that fine honey production with which he is a master hand. He is a self developed teacher of a fine art the advocates of which are now few and far between.

Quebec's Assistant Provincial Apiarist showed us how the Inspection service in his Province helps the beekeepers who have disease. Two trucks have been fitted with rendering equipment and sterilizing equipment and the inspectors are able to help the beekeeper rehabilitate his equipment and save his wax. To me that makes sense.

Dr. Dunham, who is not only a teacher and investigator, but also a beekeeper in partnership with his

wife and son (800-1000 colonies), has made considerable use of the two queen system in Ohio. His own increased crops do much to overcome the economic strangle that many of us are in. His plan is a modification of the method developed by Dr. Farrar. If you are interested write to him, Dr. W. E. Dunham, Ohio University, Columbus ("The Modified Two Queen System").

Art Kehl gets you by the ear when he asks "What is that nice syrup so widely advertised as such a healthful sweet?" Chorus: "Karo!" Right you are. But—it's a corn syrup. Now what is that delectable sweet produced by the honeybees that is nature's own? Chorus: "Honey!" Right you are. Note the inference "Karo" is a brand name; "honey" is just honey. On the market the identification of a brand name is important. Art also points out that the usual skills found necessary in selling are just as needful in the marketing and distribution of honey. As we have so often said, producing honey is one job and selling it is another and entirely different one.

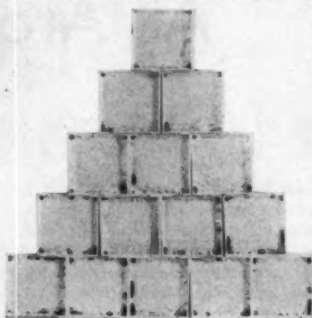
Deyell tells how bees at Medina are wintered with abundant stores, fine colonies, protecting windbreaks, and no packing. All hives with upper entrances. So far that's our experience too. But in the whistling cold north it's another matter. More protection is best. And a combination of strict fall elimination and satisfactory spring replacement, as Chamberlin advises ("Packages and Overwintered Colonies", page 99) seems best.



Here at Last

HONEY IN THE COMB

by Carl E. Killion



The only book written within the past thirty years dealing entirely with comb honey production.

This book is the result of a lifetime study of equipment and management most suitable for the production of fine quality comb honey. A book filled with valuable information and illustrations for all who wish to produce this wonderful product.

Why not produce the kind of honey that is in demand everywhere and get the most pleasure and profit out of beekeeping?

This book has 9 chapters, 115 pages and 71 illustrations. The most complete book on this subject to be found, HONEY PLANTS, EQUIPMENT, SEASONAL MANAGEMENT, SWARM CONTROL, QUEEN REARING, POLLEN SUPPLEMENT, WINTERING, MOISTURE REMOVAL, MARKETING and BULK COMB HONEY.

The author is giving the result of his lifetime experience on this subject in book form.

Price of the book is \$3.00 postpaid in the Continental United States.

KILLION & SONS APIARIES

PARIS, ILLINOIS

GULF BREEZE ITALIANS



We have adopted the "GULF BREEZE" brand to fully identify our improved stock. Our old customers will appreciate our efforts to produce better bees, and new customers will find new pleasure and profit by using GULF BREEZE.

Quantity	Queens	2-lb. Pkg. W. Q.	3-lb. Pkg. W. Q.	4-lb. Pkg. W. Q.
1-24 -----	\$1.15	\$3.25	\$4.25	\$5.25
25-up -----	1.00	3.00	4.00	5.00

BESSONETT BEE COMPANY

Donaldsonville, La.

CAUCASIANS UNLIMITED

Unlimited in Quality — Unlimited in Quantity

Queens of unlimited quality for delivery in 1951 at no increase in prices. Please order early.

\$1.00 each

\$90.00 per hundred

Probably the largest producer of Caucasians exclusively.

THOS. S. DAVIS

Route 7, Box 3914

Sacramento, California

ITALIAN BEES AND QUEENS

Comparison proves that
Homan's Profit Producing Bees and Queens

will please you from the brood nest to the harvesting of a great crop of honey. Best of quality and gentle, health certificate, full weight, prompt live delivery guaranteed.

Prices through May 15:

Lots	Queens	2-lb. Packages	3-lb. Packages	4-lb. Packages
1-24	\$1.10	\$3.50	\$4.50	\$5.75
25-99	1.00	3.25	4.25	5.40
100 up	.90	3.00	4.00	5.00

FARRIS HOMAN

Telephone 4975 Shannon, Miss.

The Postscript

by Frank C. Pellett

A letter has just come to me from a resident of Vienna, Austria, asking for information on comb honey production and saying that he is unable to find a book which gives that information. Since a new book on comb honey by Carl Killion is just coming out, I'm sending the letter to Carl for answer. Carl is generally recognized as one of our very best comb honey producers, and I'm wondering whether there might be enough interest in Central Europe to lead to a translation for publication there. It is my feeling that a substantial increase in comb honey would have a very good influence on our honey market.

Neither the two major operations nor the long months of hospital care gives any promise of permanent relief. I am happy to be with the family again although confined to my bed and entirely dependent upon my wife for care. Work in the test garden will be greatly reduced since I must depend entirely upon others, even the answering of letters.

Meadow sage (*Salvia pratensis*) is an excellent plant for roadside planting. If beesmen will scatter seed along newly worked roadways they can do much to add to the spring nectar supply. It offers a fine bloom and attracts the bees at about the close of dandelion flow. It is not likely to become weedy in its habit and we do not know of any objectionable features.

Licio Mariolino Solheiro of Belem, Brazil, sends me a fruit called urucu, which means red in the Indian language. He reports that it blooms during the whole year and yields a very medicinal honey, dark red in color and with a rather heavy body. Coming from a tropical climate it is useless to plant it here. I am sending it on to Frank Robinson at the Florida experiment station in the hopes that it may succeed there. I certainly wish for the opportunity to learn about the new and strange honey plants which are likely to be

found in his Florida garden within a few years.

When M. S. Stone visited South America last year, William George A. Birt, of the Argentine Republic, sent me a dozen packets of seed of honey plants from that country. One especially is of very great interest. It is the bushy alfalfa, which is a shrubby plant reaching a height of four or more feet. It is a very promising plant from a warm climate and I'm hoping that it may be given a good trial in the warmer part of the United States. The plant is not too popular with farmers because it is too woody for hay. It would seem to be worthy of attention as a pasture plant in much the same way as the shrubby lespedezas. The use of such woody honey plants for control of erosion and for game cover would greatly increase the available bee pasture.

It is surprising to learn that nearly 6,000,000 pounds of sweet clover seed were imported in the last six months of 1949. This was more than the total of red clover, alsike and white clover altogether. It would be interesting to know how much sweet clover seed was produced in this country. Sweet clover has found an important place on the American farm.

The soybean appears to be one of the oldest of cultivated plants. There are references to it dating back to more than 2800 B.C. Yet it has come into cultivation in this country only in recent years. Unfortunately it yields nectar sparingly, and does not require the services of the honey bee in pollination. Soybeans have replaced plants which provide better bee pasture in many neighborhoods.

Fifty years ago, Eugene Secor and N. E. France were among the best known of American beekeepers. Both were constantly in the public eye, yet we seldom hear either of them mentioned now. It goes to show how quickly we are forgotten when we pass off the stage of action. Langs-

troth appears to be the only one with a contribution to insure a place in public memory. His invention of the movable frame hive is so important as to keep his memory fresh as long as beekeeping remains an important activity.

"Bee Bread" which is the term used a generation ago for pollen, is recognized in the United States Dispensary. A dose of a drachm three times a day is said to cause great increase in urinary secretion. It is said also to be entirely palatable and inoffensive to the stomach, with no disagreeable after-effects except a slight looseness of the bowels.

There is much confusion as to the locust trees because there are so many different kinds. The ever-flowering locust is *Robinia semper-flora*. It is not a honey locust which is a very different tree. The ever-flowering locust is usually grafted on the root of the common black locust and should it start below the graft we have the black locust. We do not know of any variety of honey locust which blooms for more than a very few days in any one year.

From Mexico City comes a report from Claude R. Kellogg of a nice honeyflow in late January. His Carniolian bees were putting up some of the finest white honey. He is enthusiastic about the Carniolians and likes them better than either of the other races. He finds them more gentle than the Italians he has tried and likes their more compact brood nest. He says that even the black color, with a touch of gray in the band, is much prettier than the Italians. He mentions the fact that some wild cherry trees which we saw when we visited him several years ago, are about half through blooming. When his letter came we had been having zero weather for some time. One morning it was twenty-four below, so you should be able to imagine how much I would like to be where the weather is warm.

By the time you receive this copy of your favorite magazine many beekeepers will have made definite plans for the coming season.

Having returned from the meeting in Denver with re-newed enthusiasm, same as we have, they are planning for another good honey crop such as we enjoyed in most areas last year.

May we suggest that you too check over your equipment and if there are replacements to be made or new equipment is desired, write for our new catalog which will be off the press by the first of March. Just a post card will bring it to your door.

We offer a complete line—all of the wooden goods offered in our catalog are made right here in our own plant, and sold direct to the beekeeper.

Why not decide now to increase your comb honey production this coming year—a form of honey that sells fast—no surplus or holdover when you produce section honey.

MARSHFIELD MFG. CO.

(INC.)

(Heart of Wisconsin's Dairyland)

MARSHFIELD, WISCONSIN

Package Bees & Queens

In ordering from us, you will get:

- 1. Quality bees of proven strain.
- 2. Shipment on dates desired.
- 3. Prices you will agree are right.

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T. W. Burleson & Son

Waxahachie, Texas

Package Bees and Queens

QUALITY THREE-BANDED ITALIANS:

	2-lb. w. q.	2-lb. w. q.	4-lb. w. q.	Queens
1-24	\$3.25	\$4.20	\$5.10	\$1.10
25-99	3.15	4.10	5.00	1.00
100-up	3.00	3.90	4.90	.95

For packages with Dadant's Starline Hybrid queens add 35c per package.



DADANT'S STARLINE HYBRIDS are Genuine Disease Resistant Queens. This is a combination of strains each with outstanding traits. The combination is made by artificial mating of the queen and drone mothers to insure uniformity of performance and to maintain the lines in a pure state. The standards of the producers of this stock are high and exact.

1-24	\$1.45	25-99	\$1.35	100-up	\$1.30
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No charge for clipping, painting or Airmailing queens.

GARON BEE COMPANY

Donaldsonville, Louisiana, U. S. A

Here We Are Folks:

It is nearly time to start shipping

PACKAGE BEES

Have you given us your order?

We have not waited for your order but have made plans far in advance to ship your bees. Our cages, cans and other necessary supplies are stored and ready to use on a moment's notice.

Our colonies are in the best condition in years for production of Package Bees. Healthy well fed colonies mean better bees for you.

We will feature "Three Way Hybrids" (Kelley's Island Developed) at no extra cost to you. State which queens you want in your packages, otherwise we will ship our regular stock.

Prices as follows:

	Queens	2 lb. w. q.	3 lb. w. q.
1 to 25	\$1.10	\$3.25	\$4.25
26 up	1.00	3.00	4.00

Queenless package deduct price of queen.

"THEY PRODUCE" ROSSMAN & LONG

P. O. Box 133

Moultrie, Ga.

PACKAGE BEES AND QUEENS

For the Hobbyist, for Pollination, for the Honey Producer—regardless of what purpose you use bees for, we can serve you to your best interest. Our modern equipment and methods enable us to put out the very highest quality and yet give you popular prices.

A FAMOUS STRAIN OF LIGHT COLORED ITALIANS

Produced by the World's most modern bee breeding establishment.

NEW 1951 PRICES

Lot	Queens	2 Lbs.	3 Lbs.	4 Lbs.	5 Lbs.
1-5	\$1.35	\$3.55	\$4.50	\$5.45	\$6.40
5-15	1.30	3.50	4.45	5.40	6.30
15-25	1.20	3.40	4.35	5.25	6.20
25-100	1.15	3.30	4.25	5.20	6.10
100 up	1.05	3.20	4.15	5.05	6.00

Select Tested Queens—Before June 1, \$10.00. After June 1, \$5.00.

Above package prices include queen. Queenless packages, subtract \$1.05 from price of package with queen. All queens are airmail, postpaid, but package bees are F.O.B. shipping point and are shipped Express collect. It is preferable to ship package bees by Railway Express, however, they can be mailed and in that event, customers should include postage.

TERMS:

Small orders, cash in full. Large orders, 20 per cent deposit, balance to be received two weeks before shipping date. U. S. Funds. A 10 per cent discount is allowed on package bees if shipment is to be made after May 20th. A 20 per cent discount is allowed on queens if shipment is to be made after May 20th. And a 25 per cent discount is allowed on queens to be shipped after June 1st.

THE DANIELS APIARIES

Picayune, Mississippi

See Our 1951 Catalogue -



If you have only one colony or thousands we want you to receive our 1951 catalogue. We list many important items not found in the other catalogues—items that will save you time, money and effort. This catalogue contains 64 pages—nearly twice as large as our competitors'. The listings are so simple and clear that you will learn a lot in a few minutes.

**WRITE FOR YOUR FREE COPY
TODAY!**

The Walter T. Kelley Co. ^{Box 210} Paducah, Ky.

YOUR CHOICE of Three Outstanding Breeds

THE BEST TO BE HAD AT ANY PRICE.

REGULAR ITALIANS:

Our regular stock, bred for high honey production, will not swarm unless neglected. Positively gentle.

CAUCASIAN:

We are using the best breeding stock to be had in America. These bees are grey in color and very gentle. Heavy producers.

PRICES:	1-24	25-99	100 up
	1.24	1.05	1.05

RICH HONEY FARMS



DADANT'S STARLINE HYBRIDS ARE DISEASE RESISTANT

This is a combination of Italian strains, each with outstanding traits. These are combined by artificial mating of the queen and drone mothers to assure you of uniformity in performance and to maintain the lines in a pure state. Nothing is left to chance. The standards of the originators of this stock are very high, and exact. Do not confuse this breed with the old resistant lines. These are uniform and gentle. May be worked in favorable weather without gloves and veil.

When ordering Starline Stock include 25c extra for each queen with or without package.

Queens	2-lb.	3-lb.	4-lb.
\$1.20	\$4.00	\$5.00	\$6.00
1.10	3.75	4.75	5.75
1.05	3.50	4.50	5.50

Jeanerette, Louisiana

HIGH QUALITY ITALIAN Package BEES & QUEENS

Lots	2-lb.	3-lb.	4-lb.	5-lb.
1-29	\$3.25	\$4.00	\$4.75	\$5.50
30 up	3.00	3.75	4.50	5.25

Extra queens—\$100 each.

I use only new, neat, light-weight shipping cages. I ship express collect or Parcel Post when prepaid by customer. State Health Certificate and live arrival guaranteed.

Send requirements early for preferred shipping dates.

CARLUS T. HARPER
New Brookton, Alabama

LIGHT ITALIAN

2-lb. ----- \$2.75

3-lb. ----- 3.75

Additional pound—\$1.00

Queens each—85c

For queenless package deduct price of queen.

Queen clipped on request.

B. A. ANDERSON & CO.
Opp, Alabama

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Are Lost Each Season by Beekeepers Trying to Save

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For **QUALITY Package Bees and Queens**

Write

WEAVER APIARIES
Navasota, Texas

Attention, Please! Bees . . for pleasure and profit

This covers Mr. Beekeeper, large or small; Mr. Farmer, who grows seed crops which need bees for pollination to ensure more and better seed production (when seed crops are pollinated by bees); and Mr. Fruit-grower, who needs bees for pollination in 1951. We warn with an important message to one and all: If you have tried and failed, you must try again. Don't give up the ship. We haven't, and both success and pleasure have come our way.

DON'T let your empty equipment lie idle for 1951. Mr. Beekeeper, whether one hive or a hundred, at the price of package bees and queens. For seed crops, farmers need bees for more seed production per acre. Fruit growers need bees for pollination. Our nearest seed-cleaning plant reports—No bees, no seed crop—same for fruit.

WE HAVE TO OFFER YOU—YOUNG HIGHEST PRIME QUALITY PACKAGE BEES AND QUEENS
(Liberal overweight)

THE IMPROVED STRAIN of three-banded Italians, backed by over 30 years' careful selecting, breeding, and shipping to all points in U. S. A. and Canada. Each year our breeding and mating stock is carefully picked and tested out for the coming season from hundreds of best by test colonies, which gives you benefit of each season's improvement when buying from us.

We are booking orders for the season of 1951, plan your requirements for this season and place your orders early. We are working each day from now on to fill your orders promptly on the day you want them with the very best of **QUALITY BY TEST**. Let us know your 1951 requirements. We guarantee to please you in every respect or money cheerfully refunded. Shipment guaranteed on date you desire. We can take care of your rush orders from March 15th on. No disease. Health certificate with each shipment.

1951 LOW PRICES

Orders booked 20% down payment, to confirm. Balance due 10 days before shipment

	Queens	2-lb. with queen	3-lb. with queen	4-lb. with queen
1-24	\$1.00	\$3.25	\$4.00	\$4.50
25-99	.90	3.00	3.80	4.25
100-up	.85	2.75	3.50	4.00

H. A. FARMER APIARIES

COTTONWOOD, ALA., Phone 2582

Telegraph and Express Office, DOTHAN, ALA.

Market News

by M. G. Dadant

Reports would indicate that although the weather has been extremely and constantly cold over a large section of the country, there have been one or two moderating spells during which the bees could make flight except in the northernmost sections. Practically all over the country, moisture has been sufficient or at least the equal of the average for years past. This did not apply, however, to the southern plains states or parts of Wyoming and even Colorado and Utah.

However, new extremely cold spells extending as far down as the Rio Grande Valley and into Florida have at least had one good result, and that is that they have assured more moisture in the semi-arid section than would otherwise have been the case. In many sections an inch of moisture in the form of either rain or snow has occurred during mid-February.

The Northwest similarly has had satisfactory amounts of moisture and this has extended down through northern and central California. From the Santa Barbara section south, however, moisture is still less than in 1950 and much below the average. In the intermountain territory snows have been quite satisfactory, apparently with the possibility of snow after March 1, so there should be sufficient moisture for irrigation purposes during the 1951 season. I do believe, however, that in the central western areas, there is a deficiency in sub-soil moisture which will have to be made up by satisfactory rains during the early spring and during the growing season if we want to avoid undue drought during the summer.

Wintering

Wintering has been satisfactory in most sections as far as can be ascertained without looking directly into the bees.

The unusual long periods of cold

undoubtedly will have called for a consumption of stores above average, and this, combined with the fact that the fall season was a prolonged warm period during which bees probably consumed more than ordinarily, should make it important that beekeepers examine their bees just as early as possible in the spring for feed, as some starvation may develop when brood rearing starts. Also, in the case of extremely cold weather over a longer period as has happened in some of the northern areas, there is a possibility that the bees were unable to move their cluster over to the stores, and starvation may have ensued with plenty of stores available in other parts of the hive. All in all, we would imagine that the amount of losses this year will be somewhat larger than ordinary.

In the breeding areas of the South, two cold spells during February extended clear to the southern coast and even into central Florida with the result that many of the early pollen bearing plants were badly frozen. As a result, bees have been considerably delayed in their early brood rearing. This may have some effect on early shipments of package bees, although ameliorating weather in late February and continuing through the month of March will help make up for the earlier losses.

Honey Moving

In most sections of the country, honey is moving quite satisfactorily in a retail way, with slower movement being indicated in the western plains section than in other parts of the country. Considerable honey has been put up by packers on the government order for 5-pound pails apparently scheduled for school use. In fact, there has been some difficulty encountered in getting sufficient 5-pound tins for the packaging of this honey owing to the restrictions on tin. Efforts are now being made to have these restrictions modified by the authorities at Washington.

Honey Wanted—

Cars and less than car. Top Prices.
C. W. Aeppeler Co., Oconomowoc, Wis.

Will Honey Move?

With practically no exception, reports coming in are to the effect that honey will be well moved out of the way before the new crop is available. Some still is being shipped in carlots to European points on the government program which has reduced the pressure particularly in Florida and some other sections where amber honey was still available. What honey now is held by beekeepers is being held we believe in anticipation of a better price than has so far been available. In fact, there were a considerable number of beekeepers who anticipated that the increased stringencies caused by the war in Korea and price controls might lead to a decided advance in honey prices which apparently has not yet occurred, although it is a decided possibility for the new 1951 crop. At least we have heard this expression on the part of one or two of the packers who apparently expect a better clean-up than has been the case in several years past.

Canada Reports

In the Canadian provinces moisture and weather conditions are satisfactory throughout, and reports are that most of the honey on the present basis of sale will move before the new crop. The only province which reports slow sale is the province of Quebec, which, however, has a heavy population and should be able to clear the honey by making an added effort.

Summary

All in all, the cold weather has been excessively prolonged except for the intermountain sections, and bees as a consequence, have used much honey and may be in danger of starvation early. Honey plants, however, should have come through satisfactorily as weather and moisture conditions seem desirable. Most honey will have moved and prices should range upward rather than downward on the new crop.

Allen Latham's BEE BOOK

The first and only book ever written by the great master of beekeeping, published December, 1949. 200 pages. 27 chapters. Handsomely bound in cloth and sent to you postpaid in special protective container.

\$2.95 Postpaid

HALE PUBLISHING COMPANY
Hapeville, Georgia

BEE SUPPLIES

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MANUFACTURERS—JOBBERS
RENESSA, WISCONSIN

BUY AND SELL

BEEES AND QUEENS

FOR THE BEST OFFER in 1951—Bees and Queens—write Cottage Hill Apiaries, Rt. No. 2, Box 64, Mobile, Alabama.

YANCEY HUSTLER Packages and Queens. The old reliable honey production strain. Will be ready April 1st. Caney Valley Apiaries, Bay City, Texas.

THREE BANDED ITALIAN bees and queens—extra fine quality. Write for 1951 prices. Alamance Bee Company, Graham, N. C. Phone 4703.

CERTIFIED ITALIANS 75 cents pound. Write for prices on loose queen and other size packages. Valdosta Honey Co., Valdosta, Ga.

THREE POUND PACKAGE Italian bees with queens, \$4.00 each. Express collect. Live delivery. Todd Apiaries, Colquitt, Ga.

CAUCASIANS—2-lb. pkg., \$3.00; 3-lb. pkg., \$4.00. Untested queens, \$1.00. Tillery Brothers, Greenville, Ala.

QUEENS OUR SPECIALTY—Italians, 90c each; Carniolans, \$1.25 each; Caucasian, \$1.00 each. All queens shipped by Air Mail and guaranteed to please. Walter D. Levette, Bx. 364, Ft. Pierce, Fla.

YES, ALL COMPARISONS prove that Green's profit producing queens are the best to be had. They will please you from the brood nest to the harvesting of a great crop of honey. Backed by 22 years of breeding better queens. Price, 90c each. D. P. Green, Deland, Fla., Rt. 2, Phone 5123.

GOLDEN QUEENS—\$1.00. O. E. Brown, Rt. 1, Asheboro, N. C.

CAN SUPPLY one or two truck loads of package bees in April or May. Hopkins Honey Farms, Maringouin, La.

IMPROVED ITALIANS—600-pound strain. 3-lbs. bees with queen, \$4.05. Queens, \$1.00. Henry Loehr, Jr., Caldwell, Texas.

ITALIAN QUEENS—\$1.20 each; 100 or more, \$1.00 each. Every queen guaranteed. R. R. Robertson, 1197 Locust St., Gridley, Calif.

3-BAND ITALIAN QUEENS—\$1.00 each. Luther Pickett, Manager, Orange Bee Co., Effland, N. C.

PACKAGE BEES AND NUCLEI—Also queenless package bees and frames of brood with bees. Walker Apiaries, Pharr, Texas.

BREWER LINE-BRED Caucasian queens—1-24, \$1.25; 25-99, \$1.15; 100 up, \$1.00. Booking orders for April 1. Brewer Bros. Apiaries, 3616 Caucasian Circle, Tampa 9, Florida.

GOLDEN ITALIAN bees and queens—Very gentle and good workers. A bee you will be proud to own. Write for prices. Carolina Bee Farm, Graham, N. C.

CARNIOLAN, ITALIAN and hybrid queens and bees for delivery now. Untested, \$1.25 each; tested, \$2.50; breeders, \$5.00. After April first—untested, \$1.00 each. Wm. Atchley, 500 E. 9 Street, Upland, Calif.

FOR SALE

500 COLONIES of bees for sale in standard 10-frame hives. Hoffman frames, all equipment including 13 locations at Blackfoot, Idaho. Cozy Nook Honey Co., 3773 Moore, St., Venice, Calif.

FOR SALE—Cut comb drier and knives. The Miracle Drier complete—just what beekeepers have been waiting for. Send for description and prices. John Bondreau, 2800 West Broadway, Blue Island, Ill.

Copy for this department must reach us not later than the tenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent.

Rate of Classified advertising—13 cents for each word, letter, figure or initial, including the name and address. Minimum ad. ten words. As a measure of precaution to our readers we require reference of all new advertisers. To save time, please send the name of your bank and other references with your copy.

Advertisers offering used equipment or bees on comb must guarantee them free from disease or certificate of inspection from authorized inspector. The conditions should be stated to insure that buyer is fully informed.

BEEES FOR LEASE AND SALE—Montana, Wyoming, Idaho, Nebraska. Contact Bradshaw & Sons, Wendell, Idaho.

FOR SALE—600 three-story ten-frame colonies of bees, brood nest and 2 deep supers with 9 drawn combs, all wired foundation, mostly Dadant choice equipment well painted, bees heavy with honey, 45-frame Simplicity extractor, 2 tanks, honey pump, 3-room house, 6 extra lots in center of town. City water, electric lights and high school. 12,000 feet dimension lumber for extra house or honey house. Choice climate and location. Honeyflow June and July white Dutch, aliske, Ladino and sweet clover. Honey white choice quality. Everything listed for \$10,000. If interested act quick. Reason for sale—old age. Stahlman Apiaries, Buhl, Idaho.

FOR SALE—400 colonies 10-frame, locations and equipment. Arthur J. Heebry, Rt. 1, Bx. 404, Ripon, Calif.

FOR SALE—19 colonies of bees, reasonable. Absolutely no disease. Peter Lembo, 13-21—135th St., College Point, New York.

ONE TO THREE THOUSAND colonies of bees in Minnesota for lease or sale. Need experienced helper. Hopkins Honey Farms, Maringouin, La.

FULL SETS of twelve numbers of the American Bee Journal for 1925 to 1938. Also 1942 and 1943. This is an excess over what we usually retain for library orders. Your choice any year (twelve numbers) postpaid only \$1.00, as long as they last. A lot of good reading. American Bee Journal, Hamilton, Ill.

FOR RENT—A few hundred colonies of bees in their present locations in northern Minnesota. C. McReynolds, Talco, Texas.

FOR SALE—Complete set of Gleanings in Bee Culture, 1875-1950. Lacks only six volumes. Francis Higgins, Gallaudet College, Washington, D. C.

FOR SALE—200 one-story hives. No disease. Honey house and equipment for all. Elmer Reinert, 5916 Beard Ave. So., Edina Village, Minneapolis 27, Minn.

MOVING to new location—Must sell—30 M.D. bottom boards, new KD, \$41.00. 80 M.D. extracting supers, frames, new KD, \$200.00. 50 ten-frame bottom boards, new KD, \$60.00. 200 lbs. 5 1/2 x 16 1/2 wired foundation, 25-lb. carton, \$25.00. 80 ten-frame comb honey supers, 4 x 5 x 1, used and painted, \$125.00. Other equipment at big savings. Order from ad. Ohmert Bee Farms, No. Cascade Road, Dubuque, Iowa.

ONE HUNDRED Modified Dadant shallow square colonies and five hundred knocked down rims. Write Bee Equipment, 3167A N. 44 St., Milwaukee, Wis.

FOR SALE—Wired ten-frame supers, \$1.25 each, truck lots. Box 3, % American Bee Journal.

FOR SALE—600 colonies of bees with full equipment. Mrs. Clyde Fisher, Joliet, Montana.

BEEES—\$1.00 per lb. Super Apiaries, 114 Des Moines St., Webster City, Iowa.

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WANTED—All grades comb and extracted honey, large or small amounts. Quote price in first letter. Mail sample. King Honey Co., 336 Bales St., Kansas City, Mo.

TEXAS HONEY WANTED—Send sample. Delivered or f. o. b. price. Also bake honey. Lange Apiaries, Rt. 2, Box 23-W, Mission, Texas.

WANTED—Extra white and light amber honey. Let us ship you the containers. Sell us your honey for CASH on delivery. The Hubbard Apiaries, Manufacturers of Bee Supplies and Comb Foundation, Onsted, Michigan.

WANTED—Extracted honey, white or light amber, in 90's. State price in first letter. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois.

HONEY AND WAX WANTED. Mail sample. Advise quantity. Bryant & Sawyer, 3425 Hunter St., Los Angeles, Calif.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 1380 Produce Street, Los Angeles, California.

WANTED—All kinds and grades of honey. Sample requested. Cole Honey Co., 4460 Piedmont Ave., Oakland, Calif.

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WANTED—Honey in all grades. Submit samples. Highest prices paid. Schults Honey Farms, Ripon, Wisconsin.

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NEW CROP OF HONEY shipped daily from producer in Florida. Pure orange blossom, 5-lb. pail \$2.25. Pure Florida cut comb honey, 5-lb. pail \$2.75. No C.O.D. orders; all shipments prepaid. E. R. Haley, Box 1610, Daytona Beach, Florida.

ANY GRADE—any amount. Alexander Company, 819 Reynolds, Toledo, Ohio.

OHIO DELICIOUS extracted white clover honey in 60-lb. cans, \$9.00 per can. Sample 25c. Melrose Apiary, Delphos, Ohio.

WANTED

WANTED—2 45-frame Root extractors. Good condition. State price. Stahlman Apiaries, Buhl, Idaho.

USED MODIFIED DADANT hives, brood chambers, shallow supers, equipment, with or without combs, disease free. State full information. R. L. Henneke, 718 Maple Street, Rockford, Illinois.

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YOUR WAX WORKED into quality medium brood foundation, 23c pound; 100 pounds, \$18.00. Medium brood foundation for sale, 80c pound. Fred Peterson, Alden, Iowa.

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WANTED—Two men to help shake package bees April 5 to about May 15. Can furnish living quarters for man and wife. Give age, experience, etc. in first letter. H. C. Short, Fitzpatrick, Ala.

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Carloads and less than carloads. Mail sample and best prices in all grades.

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HELP WANTED—Need several experienced beemen for extracted honey production. Must be competent, able to handle trucks and extensive outyard work. Give reference and wages expected in first letter. Would like men out of draft class. Johnson's Bee Farms, Callaway, Minn.

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SINGLE MAN, age 41, with twenty-two years' commercial apary experience, will operate an outfit of 400 to 1000 colonies on a wage-share crop or share crop basis. Must be east of Wyoming, north of Kansas, and west of the Mississippi River. I can furnish containers; truck to be furnished by the owner. G. W. Anderson, 828 W. Second St., Webb City, Mo.

COMPETENT BEEMAN for season, April through November. C. Elmquist, 408 4th St. So., Moorhead, Minnesota.

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EVERFLOWERING LOCUST—Novelty in long blooming tree, very quick growing for windbreak, promising for nectar. First offering. Write for prices and particulars. Melvin Pellett, Atlantic, Iowa.

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MISCELLANEOUS

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(Continued from Page 95)

Iowa and Nebraska Joint Meeting

The date for a joint meeting of the Iowa Beekeepers Association and the Nebraska Honey Producers Association has been set for Saturday, July 14, at Council Bluffs, Iowa. The meeting will highlight a basket lunch picnic. An entertaining and educational program has been planned.

R. J. Walstrom, Iowa State College

Delaware County Beekeepers Assn. Muncie, Ind., April 6

The annual meeting of the Delaware County association will be held at the Y.M.C.A. in Muncie, Ind., Friday, April 6 at 7:30 p. m. Guest speakers will be Dr. B. Elwood Montgomery, Purdue University, Gilbert Perigo, Indianapolis, Indiana, secretary of the Indiana Beekeepers Association, and Adam Wall, state bee inspector of Huntington, Indiana. A cordial invitation is extended to anyone interested in beekeeping.

John O. Wingate, President

New Jersey Meeting

Gales, ice and snow to the contrary, the New Jersey beekeepers met in interesting session on Feb. 1 at Trenton in connection with Farmers' Week. Dulled for most of the day by a sheet of ice, a warmer temperature by afternoon gave glimpses of the differences of the rigors of winter near seaboard and farther inland at the same latitude. Underneath, the grass showed still green while we in Illinois have had a gray landscape since winter closed down shortly after Thanksgiving.

New Jersey is a small state but a progressive one. Attendance at some of their general farm sessions will vouch for that. Here we find beekeeping, except for the occasional large pollination beekeeper, in the hands of the enthusiasts; those who are in it possibly as a profitable side line, but surely in it for the fun, the pleasure of keeping bees and associating with fellow beekeepers.

R. S. Filmer and his associates have done some valuable work on cranberry and blueberry pollination. Requests to the experiment station indicate that this will be followed by more detailed information on the role which the honey bee might play in lima bean pollination. A new alfalfa (Atlantic) also needs to be studied in relation to honey bees and seed yield. Carr and Holcomb still are wheelhorses in the beekeeping economy of the state.

1951

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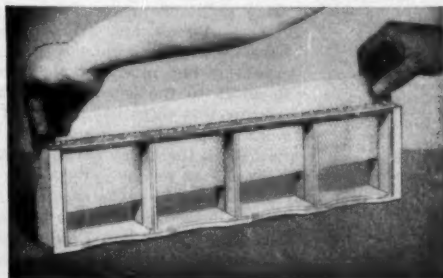
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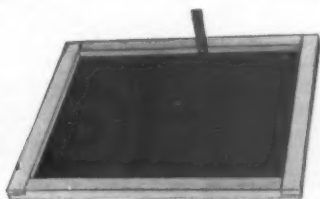
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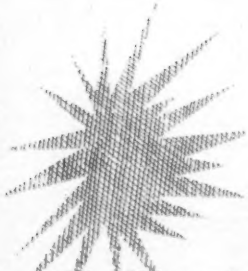
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